DOCUMENT RESUME

ED 370 224 EA 025 859

AUTHOR	Colclough, Christopher
TITLE	Education and the Market: Which Parts of the Neo Liberal Solution Are Correct? Innocenti Occasional Papers. Special Subseries "Fiscal Policy and the Poor," Economic Policy Series.
INSTITUTION	United Nations Children's Fund, Florence (Italy). International Child Development Centre.
REPORT NO	UNICEF-EPS-37
PUB DATE	Jul 93
NOTE	56p.
PUB TYPE	Viewpoints (Opinion/Position Papers, Essays, etc.) (120)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Cost Effectiveness; *Educational Economics; *Educational Equity (Finance); *Educational Finance; *Efficiency; Elementary Secondary Education; Fees; Foreign Countries; Free Enterprise System; Higher Education; Income; Private Education; Public Education; School Support; Tax Effort
IDENTIFIERS	*England

ABSTRACT

This paper examines the argument that education systems in development countries should be financed more directly by private households. It finds that cost-recovery policies are likely to be harmful to efficiency and equity if significant resources were to be generated by these means. User fees at primary and secondary levels would increase enrollments only if the revenues so gained were spent on the provision of new school places, if there were excess demand for schooling, and if the negative enrollment response among the poor did not exceed the positive response from those who were willing and able to pay. Even so, many bright, poor students may withdraw from school. A scholarship policy would be needed, which may undermine the revenue-raising objectives of user charges. The case for user charges at the tertiary level is stronger; however, tertiary fees also offend equity principles and would make loans and scholarships necessary. The challenge of raising more public resources for education should mainly be addressed through increasing levels of direct and indirect taxation, in ways that move the balance of tax incidence in a more progressive direction. In addition, payroll taxes for graduates and other highly skilled workers trained at public expense provide a more effective and equitable means. In conclusion, other policies are available to improve equity and efficiency in education that are not substantially included in the neoliberal case. Two tables, one figure, and a list of other Economic Policy Series (EPS) papers that are available are included. Contains 78 references. (Author/LMI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 370 224

unicef

INTERNATIONAL CHILD DEVELOPMENT CENTRE

EDUCATION AND THE MARKET: WHICH PARTS OF THE NEO LIBERAL SOLUTION ARE CORRECT?

Christopher Colclough*

EPS 37

Innocenti Occasional Papers

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

J. R. Clough

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

Spedale degli Innocenti
Florence, Italy

INNOCENTI OCCASIONAL PAPERS
ECONOMIC POLICY SERIES, NUMBER 37

SPECIAL SUBSERIES
FISCAL POLICY AND THE POOR

EDUCATION AND THE MARKET: WHICH PARTS OF THE NEO LIBERAL SOLUTION ARE CORRECT?

Christopher Colclough*

EPS 37

July 1993

This paper is part of the background documentation for a forthcoming study on Fiscal Policy and the Poor, edited by Giovanni Andrea Cornia.
* Fellow, Institute of Development Studies, at the University of Sussex, England.
The views expressed in this paper are those of the author and do not necessarily represent the views of the UNICEF International Child Development Centre.
The author wishes to thank Giovanni Andrea Cornia, UNICEF International Child Development Centre, for his useful comments on an earlier draft.
The author also wishes to acknowledge the excellent research assistance provided by Harry Patrinos.

CONTENTS

EXECUTIVE SUMMARY v

I. THE CASE FOR THE PUBLIC PROVISION OF EDUCATION 1

II. THE CASE FOR MARKET SOLUTIONS 2

III. ASSESSMENT OF THE NEO-LIBERAL CRITIQUE 4
Who Profits from Educational Subsidies 5
Cost Recovery in Education 7
Fees for Primary and Secondary Schooling: Arguments Based upon "Excess Demand" 8
Evidence on the Regressive Impact of Primary and Secondary School Fees 14
Cost Recovery in Higher Education 19
Loans and Scolarships 21
Alternative Revenue Measures 23
Private Education 26
Private Schooling 26
Private Initiatives in Higher Education 32

IV. CONCLUSION 38

TABLES

1. Recipients of Education Subsidies 6
2. Proportion of Household Income of Poorest 40% Needed to Finance two Children at Primary School on Full Cost-Recovery Basis 15

FIGURE

1. Supply of, and Demand for Schooling under Budget Constraint 9

BIBLIOGRAPHY 41

EXECUTIVE SUMMARY

This paper examines the argument that education systems in development countries should be financed more directly by private households than has traditionally been the case. It finds that cost recovery policies are likely to be harmful to efficiency and equity if significant resources were to be generated by these means. User fees at primary and secondary levels would increase enrolments only if the revenues so gained were spent on the provision of new school places, if there were excess demand for schooling, and if the negative enrolment response amongst the poor did not exceed the positive response from those who were willing and able to pay. Even so, many amongst the bright poor may withdraw from school, with negative consequences for both equity and efficiency, A scholarship policy would thus be needed, which may undermine the revenue raising objectives of user charges.

Those authors who use the logic of revealed preference to demonstrate a 'willingness to pay' for schooling even amongst the poor, risk confronting logical contradictions arising from the general equilibrium implications of their proposed policies. Furthermore, the partial approach to fee incidence implied by their analyses, would bring wider equity and efficiency consequences, which are not analysed. The income effects of user charges, and their implications for the consumption of other necessary goods, are also not confronted.

The case for user charges at tertiary level is stronger, both because it is plausible (although no supporting evidence exists) that the incidence of externalities is less at tertiary level than in the case of primary and secondary schooling, and because the service is presently mainly used by the progeny of the rich. Nevertheless, neo-liberal assumptions that the enrolment response to charges will be muted owing to the high private rates of return to tertiary education, are questionable in the light of recent changes to salary differentials in many countries of the South. Equally, tertiary fees would offend equity principles (irrespective of the aggregate enrolment response) unless poorer families were supported. Loans and scholarships would thus be required. But the revenue impact of loans schemes is poor, particularly during the first decade of their operation. A quick and sharp impact upon public revenues is not obtainable via these means.

The challenge of raising more public resources for education should mainly be addressed by increasing levels of direct and indirect taxation, in ways which move the balance of tax incidence in a more progressive direction. In addition, payroll taxes for graduates (and other highly skilled workers trained at public expense) provide a potentially more effective and equitable means of raising additional resources for education than do user charges, supplemented by loans, at tertiary level.

Our assessment of the evidence on private education indicates that it can be helpful to governments facing strong financial constraints, but only under circumstances which are more tightly defined than those generally allowed by most neo-liberal authors. Other policies are available to improve equity and efficiency in education which are not substantially included in the neo-liberal case. There can be no *a priori* resolution of whether market-failure is worse or better than government-failure. Both exist, and an empirical approach is mainly needed to assess outcomes.

BEST COPY AVAILABLE

I. THE CASE FOR THE PUBLIC PROVISION OF EDUCATION

There are a range of reasons why leaving the provision of education to the market may result in a sub-optimal allocation of the service to society. They can be summarized as follows:

Externalities. Some of the benefits of education accrue not only to its direct recipients, but also to society at large. Literacy, for example, lowers the transaction costs amongst individuals and brings external benefits for fertility control, and for child health and nutrition. In deciding how much to purchase, individuals compare only the personal benefits and personal costs. Yet, from society's viewpoint they should be encouraged to take account of their own consumption on the well-being of others. Private provision, or full cost-recovery, would result in under-provision of schooling in the presence of externalities.

'**Merit goods**'. Education (and health) services are often treated as goods with special merit, but which might be under-supplied if left to the market. The distinguishing feature here is not that third parties benefit from their provision, but that direct recipients benefit to a greater extent than they themselves are aware. The likely impact upon wages may be known. But the effects of education upon agricultural productivity, earnings in the informal sector, or upon family health and nutrition are much less likely to be anticipated (still less quantified) by purchasers of education.

Leads and lags. Investment in education has a long gestation period. Market signals, particularly for higher education, may thus be slow to change. Perverse market effects can be generated in these circumstances - 'cobwebs', or oscillating disequilibria may result, which need not be convergent, and thus involve waste.

Decreasing costs. Scale economies are a well-known cause of market failure, leading to monopoly. The higher levels of education may be particularly subject to this phenomenon. Some types of scientific equipment cannot be used on a small scale; in small countries the economic provision of tertiary facilities may only be possible by a monopolist. More generally educational equipment may be more cheaply bought in large quantities.

Equity. The private purchase of schooling, and especially of higher education and training, is beyond the means of most poor families. Substantial equity and efficiency costs would follow from their being excluded from participation. These costs would be greater in poorer

countries, and in those with highly unequal distributions of personal incomes. Efficient credit markets do not provide an effective solution, owing to the existence of strong imperfections outside such markets which reduce participation - particularly by poor people - in them.

Principal/agent problems. The relevant decision-making unit for matters to do with school attendance is the household - or, more accurately, the parents within it - and not the child. Thus, whereas rates of return to schooling compare the returns to the pupil with the costs to the parents, in fact the important issue is the perceived balance between the costs and benefits to the parents of sending their child to school. Since only some portion of the returns to schooling will accrue to parents, there may be rational (if regrettable) reasons for households appearing to under-invest in schooling, notwithstanding its apparently high economic returns.

Low private demand. Principle/agent problems may be magnified in countries where there are cultural biases against the enrolment of minority castes, population groups, or girls. For example, notwithstanding high potential benefits to the individuals, where custom, religion or ideology result in lower actual or perceived parental returns to educating the girl-child, market allocation would result in strongly sub-optimal female enrolments. Not merely free schooling, but special additional subsidies to the groups involved may be necessary to achieve socially desirable enrolment outcomes in these circumstances.

II. THE CASE FOR MARKET SOLUTIONS

The considerations mentioned above are powerful, and together provide the basis for the orthodox view that, in most countries, the government should remain the major supplier of educational services. Over the past ten years, however, a new group of critics have emerged who question the wisdom of the orthodox position. The main contributors have been Thobani (1984), Jimenez (1987, 1989), Mingat and Tan (1985, 1986a, 1986b, 1986c), Mingat and Psacharopoulos (1984), Psacharopoulos and Woodhall (1985: Ch.6), World Bank (1986). They advocate a substantially greater role for the price system in allocating educational services than have most earlier writers. They also advocate a much reduced role for the state as provider and organizer of education. In these two important respects they share with other 'neo-liberal' economists the view that resource allocation is usually best determined by the

market, particularly under the sharply constrained financial circumstances which have recently faced most governments in the poorer countries.

Their diagnosis of current problems facing education systems in developing countries is based upon the following three sets of observations.

Governments in the real world will not necessarily be willing or able to put things right. They are concerned, more than anything, with the business of staying in power, and thus with rewarding the interest groups upon which they depend for support. According to these 'new political economy' arguments, even where the interest groups which governments wish to reward are consistent with equity principles, as, usually, in democratic regimes, the information available to governments may not be better than that available to markets - and it may be worse. Under such circumstances market allocation may be more promotive of equity and efficiency.

Resources for expansion are not available from the public sector. At present, education systems in most developing countries are under-expanded, in the sense that large numbers of children are excluded from primary systems, and returns at each level remain high. Yet, owing to recession and adjustment, relative decline in enrolments has been common and absolute decline has often occurred. Additional resources for expansion and qualitative improvement need to be sought.

Existing resources are misallocated. Tiny amounts in per capita terms are spent upon primary schooling, in comparison with the large costs of tertiary education. The beneficiaries of the latter are mainly upper income families, who themselves will receive further high returns from the educational subsidies diverted towards them by the state. In some countries, particularly in those of sub-Saharan Africa, the proportion of the per capita costs of schooling recovered decline as the educational level increases - a highly regressive outcome of present policy.[1]

---

[1] According to World Bank data, cost recovery at primary level amounts to 6 per cent of unit costs in East Africa, and 11 per cent in West Africa, whereas cost recovery in higher education is only about 3 per cent in each case. By contrast, Asian governments recoup around 2 per cent of primary unit costs and 12 percent of those at tertiary level. The figures for Latin America are 1 per cent and 7 per cent respectively (World Bank 1986: Table 4).

The solutions advocated for the above problems differ between sources, but there are usually four common elements in the various neo-liberal financing strategies proposed:

(i) User charges should be introduced at tertiary and, sometimes, at lower levels of education. Thus, living expenses, and some or all tuition charges, would be passed from the state to parents, not all of whom would be able to pay. Scholarships would thus be needed to provide for bright children of poor parents. Equity and efficiency would be promoted.

(ii) Student loans should be introduced at tertiary level for all students, again bringing equity and efficiency benefits.

(iii) The private provision of education at all levels should be encouraged, on the grounds that (very limited evidence suggests that) they have smaller costs per pupil, and that, by taking pupils out of the public system they liberate public resources for use by others.

(iv) Finally, the savings generated by the above measures should be used to expand and improve those parts of the education system which are most socially profitable - that is, in most cases, primary schooling.

III. ASSESSMENT OF THE NEO-LIBERAL CRITIQUE

This paper does not quarrel substantially with the diagnosis of the problems facing education systems in developing countries which is provided by neo-liberal authors. There is agreement that additional resources for expansion of education are needed, that existing programmes are often inefficient and characterised by misallocation, and that governments are influenced by groups which have vested interests in preserving the status quo. The paper argues, rather, that cost recovery policies are likely to be harmful to efficiency and equity if significant resources are to be generated by these means[2]. Alternative revenue-raising measures are

[2] An earlier examination of the neo-liberal prognosis for educational policy (Colclough 1991b) focussed upon higher education, and pointed to the fallibility of the available estimates for private rates of return to tertiary education, which many neo-liberal analysts use unquestioningly. A presentation of that evidence will not be repeated in this paper, which provides a much broader review. For a general assessment of the neo-liberal contribution to development theory and policy see Colclough 1991a.

likely to provide a better solution. Private schooling can be helpful to governments facing strong financial constraints, but only under circumstances which are more tightly defined than those generally allowed by neo-liberal authors. Other policies are available to improve equity and efficiency in education which are not substantially included in the neo-liberal case[3].

Who Profits from Educational Subsidies?

It has long been claimed that the present distribution of public expenditures on education in developing countries is highly unequal. This does not, however, mean that it is regressive. Evidence usually cited is that the relatively few individuals who gain access to higher education receive vastly greater subsidies than those at the lower educational levels, and that those who do pursue higher studies are overwhelmingly from the richer households. Data on public expenditures per student and enrolment ratios show that per capita public spending on tertiary education is up to 50 times greater than on primary schooling; yet, typically less than 10 per cent of the age group gain entry to tertiary studies, and in Africa and South Asia the proportion is far less (World Bank 1986: Table 9). Country studies provide evidence for the fact that higher education is used mainly by the rich (e.g. Fried and Abuhadba 1991 for Chile; Navarro 1991 for Venezuela; James 1991 for Philippines; de Mello e Souza 1991 for Brazil). Many authors have used this type of evidence to argue that the impact of subsidies is regressive, and to call for a sharp reallocation of public educational subsidies in favour of the poorer groups (World Bank 1986; Mingat and Tan 1985).

Desirable though such a policy may still be, more recent evidence suggests that its basis in fact may not be as strong as is conventionally believed. In order for the impact of public expenditures on education to be regressive it is necessary that the rich should receive a higher proportion of the available subsidies than their proportionate importance in the population. Table 1 shows the extent to which the rich and the poor benefit from public spending on education for eight developing countries.

---

[3] Some of these policy alternatives - in particular those covering public expenditure priorities and reforms to achieve greater cost-effectiveness in education - are not the main focus of the present paper. They are separately analysed in Colclough 1993, and in Colclough with Lewin, 1993.

Table 1: RECIPIENTS OF EDUCATION SUBSIDIES

		Percentage of government subsidy received by income group		
Country and Sector	Year of Survey	Lower 40 per cent	Middle 40 per cent	Upper 20 per cent
All Education				
Argentina	1983	48	35	17
Chile	1983	48	34	17
Colombia	1974	40	39	21
Costa Rica	1983	42	38	20
Dominican Republic	1976-77	43	43	14
Uruguay	1983	52	34	14
Indonesia	1978	46	25[a]	29[b]
Malaysia	1974	41	41	18
Higher Education				
Argentina	1983	17	45	38
Chile	1983	12	34	54
Colombia	1974	6	35	60
Costa Rica	1983	17	41	42
Dominican Republic	1976-77	2	22	76
Uruguay	1980	14	52	34
Indonesia	1978	7	10[a]	83[b]
Malaysia	1974	10	38	51

Source: Jimenez (1989)
[a]These figures are for the middle 30 per cent; [b]These figures are for the upper 30 per cent.

Without exception, the poorest 40 per cent of the population received between 40 and 52 per cent of the available subsidies in each case. This redistribution towards the poor was slightly at the expense of the middle 40 per cent but, rather more so, of those in the top 20 per cent of the income distribution. The Table also shows the distribution of subsidies within higher education alone. Here, as expected, the picture is different. In almost every case the richest

groups capture a disproportionate share of the subsidies, whilst the poorest 40 per cent of the population receive only between 2 and 17 per cent.[4]

We may conclude that, although access to higher education in these countries, as in many others, is very unequally biased towards the progeny of the rich, taking educational expenditures as a whole, the incidence of subsidies appears, in these countries at least, to be mildly progressive. These results are undoubtedly influenced by the fact that the list comprises countries for which data happen to be available, rather than a random selection. It is significant that no African countries are represented, and that all of the countries shown have primary gross enrolment ratios (GER) in excess of 100. Inclusion of more African cases, where primary GERs are typically much less than 100, and where, therefore a significant proportion of the (poorer) population does not receive any education subsidies at all, would change the picture. In other words, there are countries, particularly in Africa, where the present incidence of educational subsidies is regressive. However, the point remains that the stylised facts upon which such a judgement is frequently made are not detailed enough to grant its general integrity.

Cost-recovery in Education

Even if educational expenditures by the state were directed more towards the poor than towards the rich, there may still be a case for cost-recovery on both equity and efficiency grounds. This has been well rehearsed in recent literature by a number of authors. Some of these arguments are relevant to the general case for user fees - i.e. for their incidence at any level of education, including primary schooling. Others are more relevant to their imposition at tertiary levels only. We shall consider these different arguments in turn.

---

[4] Pakistan appears to provide an exception to this general trend. Khan (1991), using the method of Jallade (1974) and others, finds that the combination of tax incidence and subsidies to higher education in Pakistan, given the socio-economic background of students enrolled, entail a redistribution from the middle and upper to the lower income groups. Critical to this result is that approximately 37 per cent of students enrolled in higher education were from the lower income groups in the early 1980s, the years selected for this study. Thus, access by the poor to higher education appears to be considerably greater in Pakistan than in many other developing countries.

Fees for primary and secondary schooling: arguments based upon 'excess demand'

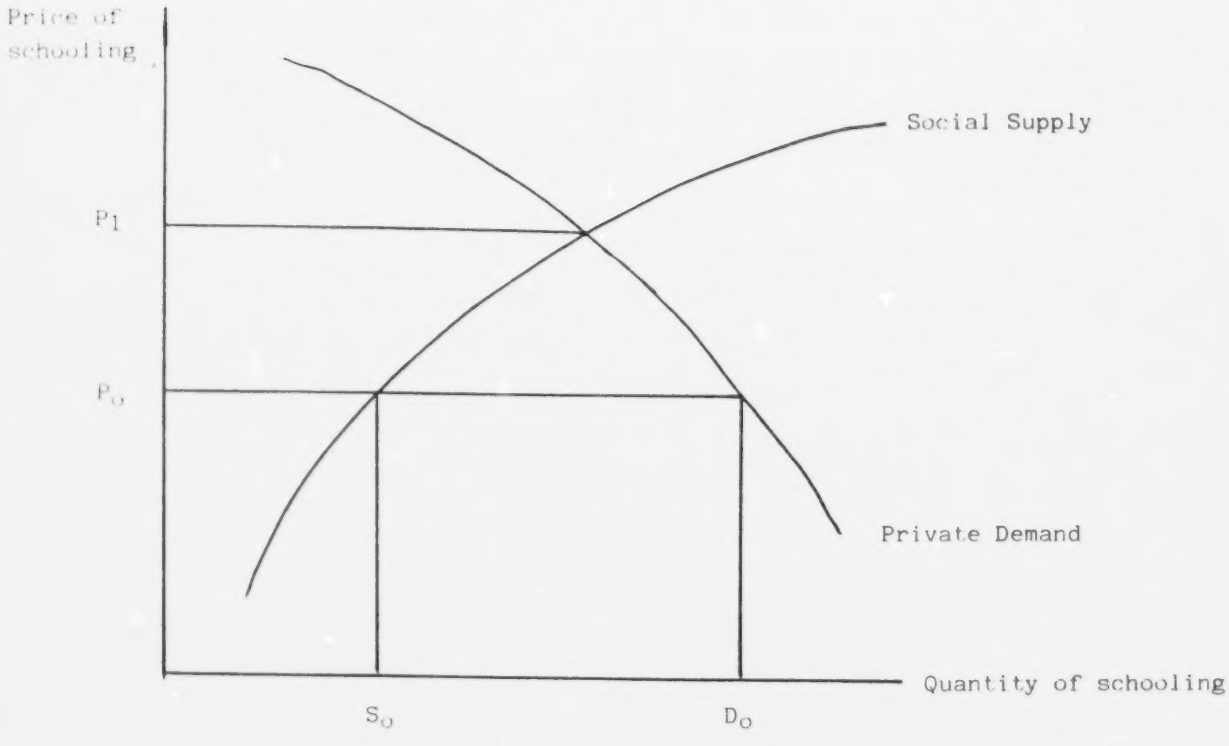
The assumptions made by those making the general case for user-fees in education are, first, that enrolments at any particular level of education are constrained because the government is unable to supply more places owing to budgetary constraints, and second, that there is excess demand for schooling at present levels of private cost. Under these circumstances it is easy to demonstrate, by manipulation of simple supply and demand curves, that if fees were charged for the level of education in question, and if the revenues so gained were spent on providing more school places, then enrolments would increase. The extent to which fees could increase would be greater, the larger the initial excess demand, and the less elastic the slope of the demand curve.

For example, if we assume that the amount of schooling which can be supplied by the government is some function of the amount which is charged for it, the relationship between price and quantity supplied may be as shown in Figure 1. For prices lower than P_1 - such as P_0 - there is excess demand for schooling (D_0 - S_0) and places are rationed. If all households are given access to the same amount of schooling, the total quantity consumed would rise, for all price increases up to P_1. Thus, some households who wished to consume more education than had been allowed by their previous ration would benefit from the introduction of higher charges, even though the total (and average) costs of schooling would rise for such households.

On the other hand, those users not wishing to increase their consumption of schooling would lose, by consequence of having to pay more for the same education as was previously purchased. Rich households are more likely to be in the former category of beneficiaries than are the poor, mainly because the income-elasticity of demand for education is high (see below). Thus, high-income households have the most to gain from some relaxation of the rationing ceiling facilitated by increased charges.

In circumstances where the initial rationing system favoured high-income households, however, some increase in user charges could be progressive, provided that the revenues so gained were spent upon increased provision. In many countries, for example, the poorest communities are the last, and, in terms of school quality, the least well served. Under these circumstances, the expansion and qualitative improvement of schools - even if financed by fees - might be of particular benefit to this group.

Figure 1: SUPPLY OF, AND DEMAND FOR SCHOOLING UNDER BUDGET CONSTRAINTS



A more subtle bias against the poor may be present when access to schooling is rationed on the basis of achievement tests, because success in these is often itself correlated with family income. In this framework, increased charges for schooling, would, in facilitating greater provision, allow a lowering of the achievement standards required for entry. Those newly able to avail themselves of access may thus tend to be from poorer households than those already enrolled. Such a change could, therefore, be judged progressive. The main point here is that those households previously excluded could not be made worse off by the imposition of charges, since education was not previously purchased by them, and they would still have the option to remain non-users. They may, however, be better off than before if they decided to take advantage of the lower scholastic entry requirements and to pay the relevant charge (Katz 1987).

A number of authors (Thobani 1984, Tan, Lee and Mingat 1984, Mingat and Tan 1986b) have argued that the very existence of excess demand for schooling is sufficient - irrespective of the characteristics of the rationing scheme in use - to justify the introduction of cost-recovery policies, even at the lowest levels of education. Simulations for Malawi suggested that moderate fee increases would be unlikely to precipitate a significant withdrawal of students currently enrolled. Even if some did drop out, excess demand was so large that, provided that the fee increase were associated with an increase in the supply of places, the overall number effectively enrolled would be larger than in the absence of fees.

It is possible to say that, under the assumptions of the above model, cost recovery policies, even at primary level could be compatible with increased equity and efficiency, provided that the same value were assigned to school attendance by all children, irrespective of the income levels of their families. The reason is simply that, under the above assumptions, total enrolments would rise. Nevertheless, their composition would change towards those in higher socio-economic groups - i.e. children of the poor would be replaced by children of the rich. This would only not be so if the service were already monopolised by children from richer households, as happens at university level in many countries. But even in that case, the new fee structure would do no more than confirm the maintenance of the existing socio-economic characteristics of those enrolled. It would not, in other words, make it worse.

It is important to note that the above implications follow only where there is excess demand for educational services. Where enrolments are constrained because of a deficiency of demand, increases in private costs would obviously cause enrolments to fall, particularly amongst the children of poorer households. Moreover, the temporal divide between an excess and a deficiency of demand may be slight. It should be recalled that levels of demand are determined in the context not only of given prices, but also of given incomes for those using the service. The fact that the advocacy of cost-recovery policies has gained prominence during a period of recession raises a number of dangers for the stability of predicted outcomes. First, where expected and actual household incomes are falling, and where, partly by consequence, the expected returns to schooling are also in decline, the demand for education will fall. Second, on the cost side, the advocacy of tuition fees has occurred in circumstances where other components of direct costs - such as, as in Zimbabwe, the construction of school buildings, the provision of building materials, sports fees, etc - have already been passed on fairly substantially to local communities (Colclough with Lewin

1993). These kinds of change in the macroeconomic environment imply that the conclusions of static analyses aiming to estimate the extent of excess demand, would become particularly insecure.

A final important practical caveat is that enrolments would also not rise if the revenue from fee increases were not spent upon increasing the number of school places (or, indeed, if it were spent upon improvements to the quality rather than the quantity of schooling, which may be separately desirable). In practice, the reallocation of revenues raised by school (or university) fees (or of the budgetary savings which they allow) towards further primary or secondary provision will often be difficult, owing to the mechanics of public sector budgeting (Hinchliffe 1993). Investigation of the practicality of such mechanisms would, therefore, be a prior requirement for the advocacy of user fees, in the context of the rationale provided by this model. For all of these theoretical and practical reasons, some fairly strict conditions have to be satisfied if cost-recovery policies were not to offend equity and efficiency criteria.

Overall, the demand for education does seem to be inelastic with respect to marginal increases in its present price. Jimenez (1987, 1989) summarizes the results of 10 studies most of which suggest average price elasticities substantially less than unity. This means that a positive impact upon government revenue could be expected from the introduction of fees. From a distributional point of view, however, it is important to know how the elasticity of demand differs amongst low and high income groups. The evidence on this is scanty, and less well researched than in the case of health. Nevertheless, that which is available suggests that (as with health services) the lowest income groups exhibit higher demand elasticities than do the richer groups.[5]

The normal implication in welfare terms for 'ordinary' goods would be that reductions in welfare would be greater, in response to price increases, for those people with lower demand elasticities (i.e. in this case, richer households). Unlike the others, this group would be unable or unwilling to substitute consumption of other commodities for the good in question, and would end up paying more for its purchase. However, in the case of education, where no substitutes are available, high demand elasticities amongst the poor indicate a greater tendency by them to withdraw from its purchase, in response to increases in its price.

---

[5] Gertler and Glewwe (1990:269) estimate that the price elasticity of demand for the poorest quartile of the rural population in Peru was, in 1985/6, generally between two and three times as large as that for the richest quartile. The estimates for the former ranged between -0.14 and -0.61, and for the latter, between -0.05 and -0.18.

As Stern (1989) points out, the fact that we view this with concern is an indication that something more than individual perception of welfare is involved, which may be evidence for an analytic contradiction. In circumstances where we (or a government) attach value to the distribution of a good itself, it may be wrong to base an argument for the means of its financing entirely upon assumptions which are derived from the doctrine of revealed preference.

This caveat is of particular relevance in assessing the contribution of an innovative group of studies which attempt to simulate the welfare impact of user fees in education and health. The particular circumstance analysed is where fees would allow the provision of these services to populations who are presently denied access, for reasons of distance from the nearest facility. These studies (Gertler and Van der Gaag 1988; Gertler and Glewwe 1990, 1992) share with many others the premise that if fees for social services are set at marginal cost, some improvement in allocative efficiency will be gained[6]. This is essentially because, where price is lower than marginal cost, demand for the service will, in part, be from people whose marginal utility gained is less than the cost of providing the service.

The main analytic insight employed in these papers, however, is that, even where schooling is free in the sense that fees are not charged, there remain substantial direct and opportunity costs of school attendance which are borne by households. In the case of education, a small part of these costs is proxied by the length of time it takes to get to the nearest school. It follows that the willingness to pay for schooling close at hand increases with the length of that alternative journey. If the cost-equivalent of the latter were known, its comparison with the marginal cost of providing the service locally (which in the view of the authors would be the optimal fee) would indicate the distribution of welfare gains and losses of a cost-recovery policy to finance local provision.

Such a comparison is achieved by the authors by using the logic of revealed preference. Utility functions are estimated (for the cases of rural people in Peru and Ghana) and used to calculate the welfare of hypothetical non-users of education if the option of increased access at increased prices were available to them. The price that generates consumer indifference between low cost-low access and higher cost-higher access is interpreted by the authors as the price which such people would be willing to pay for the

---

[6] This is notwithstanding that, in an economy that is revenue-constrained, the correct public sector price is marginal cost plus some additional element of indirect taxation in order to contribute to revenue. To ignore the question of revenue generation in such circumstances is incorrect (see Stern 1989).

service (ie that price which, if imposed, would not result in a welfare loss to such persons, if schooling were made available locally). The computations suggest that the willingness to pay amongst all income groups is greater than the marginal cost in cases where schools are more than two hours' journey away in Peru, and in the case of Ghana that people from all income groups would be willing to pay the marginal costs of improvements in school quality. (In Ghana the present 'cost' which the simulations address is not travel time to school, but the implicit costs of sending children to low quality schools, as opposed to ones of higher quality.) The authors conclude that cost recovery, on the basis of marginal cost pricing, would improve welfare for all income groups in these categories.

In practice, the implementation of policies based upon the above notions of 'willingness to pay' is likely to prove difficult. First, the above results do not support a general policy of cost recovery throughout the whole school system. Rather, their implications are restricted to improvements of the capacity or quality of the schools with respect to which the parents are required to pay fees. The schools concerned are generally those serving the poorest and most isolated communities, and cost-recovery would, under such circumstances, have highly regressive consequences if those serving the richer communities remained fee-free. Second, the costs of providing schooling for such communities are usually higher than the average costs facing the rest of the school system. Thus, the assumption that average and marginal costs are identical is probably invalid. Finally, the argument used by these authors concerning the benefits of local provision to those who, at present, are non-users of the service, is equally true of those who already do use it. Thus, provision of local schools would result not only in new enrolments from those in the local community who were previously non-users, but also from some of those who had previously travelled to more distant schools. This enrolment 'switching' response would be likely for all those for whom the fees charged locally were no greater than the implicit costs of travelling to the original school. Some of the revenues which would be raised by fees levied on attendance at the local schools would therefore be counterbalanced by losses elsewhere, because the average costs of the more distant schools would rise by consequence of their reduced enrolments. Here again, therefore, there are problems in using a partial equilibrium revealed preference framework in order to justify changes which are likely to have strong general equilibrium consequences.

A further problem for partial analyses concerns the possible implications of the imposition of fees at one level of education for the demand for places elsewhere in the system. It is a commonplace that economic motives are highly influential in determining

levels of school attendance. Now that primary schooling no longer reliably delivers access to regular paid employment, the perceived probability of gaining entry to secondary schooling has an increasingly important influence upon the decision to send children to primary school. Thus, policies which reduce such access (such as the imposition of fees for secondary attendance) may well reduce demand for primary - as well as for secondary - schooling. This has been shown in Ghana, where the distance from children's homes to the nearest middle and secondary schools (and thus the costs of attendance) appear to exert a significant negative effect upon the probability of primary enrolment. This is in addition to the separate negative impact which both the distance to the nearest primary school, and its quality, has upon primary enrolments (Lavy 1992). Under these circumstances, the coherence of a policy which aims sharply to increase the fees charged for attending secondary schools, in order to increase public investment in primary schooling, becomes questionable. Thus the wider consequences of pricing policies intended to affect only part of the system must be assessed.

Evidence on the regressive impact of primary and secondary school fees

The above arguments seem not sufficiently soundly based to justify the introduction of user-charges at primary level, unless excess demand were very high, and unless a government were extremely revenue-constrained. Quite separately, however, there is a question as to whether in many countries the poor would be actually capable of paying the costs involved. The evidence on demand elasticities, as already mentioned, is scanty, although it appears that the poor have higher demand elasticities than the rich. This evidence, however, is only relevant for marginal changes in the price of schooling, and the introduction of full cost-recovery policies would represent a major not a marginal change.

This can be seen by considering the cost of schooling relative to household incomes. Meerman (1983) provides estimates for a sample of 9 West African countries for the mid-1970s, which suggest that meeting the public costs of primary schooling for families in the lowest 40 per cent of the income distribution who had two children at primary school, would have varied between 10 and 50 per cent of family income at that time.

Table 2 provides more recent estimates for those developing countries for which we have data upon unit costs and per capita incomes. The calculations incorporate the same

Table 2: PROPORTION OF HOUSEHOLD INCOME OF POOREST 40% NEEDED TO FINANCE TWO CHILDREN AT PRIMARY SCHOOL ON FULL COST-RECOVERY BASIS (63 countries, 1986)

Less than 5 per cent	5 per cent <10 per cent	10 per cent <15 per cent	15 per cent <20 per cent	20 per cent <25 per cent	Over 25 per cent
Argentina	Bolivia	Chile	Cote d'Ivoire	Central African Republic	Ethiopia
Dominican Republic	Brazil	Costa Rica	Mauritania	Liberia	Mali
Guatemala	Colombia	Cuba	Korea		Sudan
Haiti	Ecuador	Honduras	Malaysia		Yemen Arab Rep.
Mexico	El Salvador	Jamaica	Oman		
Paraguay	Uruguay	Nicaragua	Singapore		
Peru	Venezuela	Panama	Thailand		
Uganda	Algeria	Trinidad & Tobago			
Bangladesh	Burkina Faso	Botswana			
China	Ghana	Burundi			
India	Lesotho	Kenya			
Pakistan	Mauritius	Madagascar			
	Tanzania	Malawi			
	Togo	Morocco			
	Israel	Rwanda			
	Nepal	Tunisia			
	Philippines	Zambia			
	Turkey	Zimbabwe			
		Iran			
		Syria			
Number of Countries					
12	18	20	7	2	4

Source: Calculated from World Bank data on per capita incomes, and UNESCO data on primary schooling costs. For assumption see footnote 4.

assumptions as those used by Meerman[7]. It can be seen that in only about one-fifth of the countries would the costs of sending two children to school, on a full cost-recovery basis, account for less than 5 per cent of typical family incomes amongst the poorest 40 per cent of the population. Those countries comprise some of the richer Latin American nations, together with China and the south Asian countries, where unit costs of primary schooling are particularly low. On the other hand, those where the impact on household incomes would exceed 20 per cent, on the assumptions used, are mainly African countries where per capita incomes are very low (both absolutely and relative to the costs of primary schooling). About 60 per cent of the countries fall into the 5 to 15 per cent range, and they include countries from each of the southern continents and from both low and middle income groupings.

In many parts of the world, and particularly in Africa, where improved access to better quality primary schooling is extremely urgent, such additional costs would be insupportable: in 18 of the 24 African countries shown, more than 10 per cent of typical household incomes amongst the poorest 40 per cent would be needed to meet the additional costs (and for many families towards the lower end of the income distribution the relative cost burden would, of course, be very much greater than this). The behavioural reaction to the imposition of costs as great as these cannot be predicted on the basis of existing evidence on demand elasticities. It seems that the publicly incurred costs of primary schooling in many poor countries, although they are low in absolute terms, exceed by far what poor families could afford to pay.

Under such circumstances, the regressive impact of user charges could be expected to have a number of dimensions. First, the negative enrolment response could be so great as to more than compensate for excess demand. This appears to have happened in a number of countries: there is evidence that price elasticities are often significant enough to result in reductions in total enrolments where school fees have been introduced - or raised - in recent years. In Nigeria, for example, primary enrolments had increased from 6.2 millions in 1976 to 14.7 millions in 1983. However, following the introduction of school fees in 1984 they fell

---

[7] The assumptions are as follows: the poorest 40 per cent of households have per capita incomes in the range of one-quarter to three-eighths of the average for all; taking the higher of these estimates, a six-person average family would have total income of 2.25 * GNP per capita. If such families had two children at primary school, the proportional impact of full cost recovery on household incomes would be equivalent to: (primary unit cost * 2 / GNP per capita * 2.25). The results of applying these assumptions to unit cost and average income data for 1986 are summarized in Table 2.2. Such costs are, of course, exclusive of all the direct and indirect costs of schooling presently met by such households.

back to 12.5 millions by 1986. Although there were many other factors which brought downward pressures on enrolments - not least the sharply reduced public expenditures on salary costs and materials support - the introduction of fees is reported to have been closely connected with this result (Hinchliffe 1989). In some states of Nigeria, the impact upon enrolments appears to have been much more severe than the average for all. In Bendel State, for example, the primary GER was reported to have dropped from 90 to around 60 per cent over an eighteen month period, following the reintroduction of school fees. Similarly, in Mali and Zaire, following the introduction of book and tuition fees as stipulated by their respective structural adjustment loans from the World Bank, enrolments declined (Stewart 1991). Such changes are also reported to have had a negative impact on enrolments in Jamaica (Cornia, Jolly, Stewart 1987).

The incidence of absolute declines in enrolments following increases in tuition fees provides compelling evidence for regressive outcomes. The conditions required for this to hold, however, are quite demanding, in that the fall in enrolments has to be larger than the extent of excess demand, plus the normal increment to demand provided by population growth, in order for a net reduction in enrolments to occur. However, even in the absence of net reductions in enrolments, price effects may still be important. If parents choose to withdraw their children - or not to enrol them in the first place - following the introduction of fees, this may be detectable in a reduction in the rate of growth of enrolments, rather than in an absolute fall. This seems to have happened in Malawi, for example, where primary school fees were, in 1982, raised by 50 per cent in grades 1-5 and by 25 per cent in grades 6-8 (Thobani 1984). Enrolments initially declined in most districts (Government of Malawi 1984), but growth soon resumed. However, progress was slow. The annual rate of growth of primary enrolments was cut from an average of 8.5 per cent over the decade 1970-80 to only 3.2 per cent over the years 1980-87. This latter was slower than the rate of population growth, and occurred in the context of a primary gross enrolment ratio of around 40 per cent at that time (Fuller 1989). Thus the overall rate of enrolment growth was not constrained by UPE being approached: higher fees were undoubtedly part of the story.

A similar point is also demonstrated in cases where there have been sharp increases in enrolments following reductions in the levels of fees charged. In the case of Botswana, for example, primary school fees were halved in 1973. In the same year, enrolments jumped by 17 per cent, having stagnated over the previous three years. Following this, fees were subsequently removed entirely in 1980. Again the growth in enrolments (at 10 per cent) was

higher in that year than had been the case over the four preceding years. Subsequently, from 1981 onwards, primary enrolments expanded at scarcely more than the rate of growth of the population (Kann 1984). These trends show rather vividly that primary schooling costs - even where fees are very low[8] - feature importantly in family budgets, and small changes in the size of the burden can have a big impact upon total enrolments. Obviously these changes are of greatest importance for the poorer households.

A second reason why increases in user charges for education are particularly likely to hurt the poor arises from its status as a merit good: those who are ignorant of its beneficial effects for themselves are likely to drop out more frequently, in response to increases in its price, than those who are not, irrespective of their capacity to pay. These people will be particularly concentrated amongst the illiterate - and hence the poorer - sections of the population.

Third, even if people continued to use the service, user charges would have a negative income effect which may adversely affect household ability to meet other basic needs. Evidence for the importance of an income effect is given by those countries in which enrolment ratios have fallen steeply during recession and adjustment, as households have been unable to meet the direct and indirect costs of schooling. Tanzania provides a case in point, where the primary GER fell from 93 to 69 during 1980-86, a period of steep economic decline during which fees remained unchanged. It follows that whether enrolments remained unchanged - or even rose - following the introduction of school fees, would provide no basis for confidence about the impact of cost-recovery policies upon the incidence of absolute poverty. This is because people may be prepared to sacrifice meeting other basic needs in preference to losing access to schooling. Thus the real impact of such policies upon welfare is a function of changes in household consumption as a whole, not just that of education in the pre- and post-fee case. Accordingly, if we hold particular views as to whether health facilities, shelter and sanitation, etc - as well as education - should be available to all people, the extent to which increased costs of education affect people's ability to consume those other elements of a minimally acceptable consumption basket, is also relevant. Very few analysts pose the question in this kind of way, or take account of its implications.

---

[8] The reduction in Botswana was from 6 Pula to 3 Pula per year - the latter being equivalent to around US$3.5 at that time.

Cost recovery in higher education.

The arguments in favour of cost-recovery at higher educational levels are stronger than those directed at primary and secondary schooling. This is for two main sets of reasons. First, as we have seen, the majority of students at tertiary level tend to be from the progeny of richer households. Since higher education itself provides strong private returns, a tradition of fee-free tertiary education will, *ceteris paribus*, tend to increase the inter-generational transmission of inequality in income. Second, since the social returns to higher education are substantially lower than those at primary level (Schultz 1991: Table 2.1), since these calculations also exclude the additional positive external benefits of primary schooling (such as better health and nutrition, lower fertility and child mortality) and, further, since in many countries large numbers of eligible children are still excluded from participation in primary schools, whilst many others attend schools of very poor quality[9], both equity and efficiency would be better served by diverting public resources from the top to the base of the education system. These arguments will be considered in turn.

As to the first, the literature examining the general case for cost-recovery in education, discussed above, is as relevant to tertiary as to any other level of education. But the arguments to the contrary are not so strong in this case, because the equity costs of imposing fees are lower in the contingent circumstances of present monopoly of the service by the richer groups. Additionally some have argued that externalities are not as likely to be associated with higher as with primary education (Jimenez 1989) - although the evidence for this belief is not usually given - thereby implicitly attributing fewer efficiency costs to the incidence of fees at this level.

Some authors have used the framework first provided by Thobani (1984) to argue specifically for user charges in higher education. Knight (1989), for example, shows that in Kenya, fees could be raised without an overall reduction in tertiary enrolments, and that a scholarship scheme could protect the poor but able children who are part of excess demand, but who would otherwise be squeezed out by the imposition of fees. Similarly, for Thailand, Chutikul (1987) shows that those who attend tertiary institutions are amongst the richer groups, and, given the value of their mean incomes, could afford to meet a substantial

[9] A comprehensive analysis of the causes of past under-investment in primary schooling, of the case for reform, and of the means whereby universal enrolment, in schools of acceptable quality, could be achieved, can be found in Colclough with Lewin 1993.

increase in fees. Using a modelling approach, based upon the revealed preferences of a sample of students, she argues that the introduction of fees at Thammasat University would not exhaust excess demand for places. Thus, using arguments which will by now be familiar, enrolments could increase, provided that the revenues from fees were used to increase the supply of student places.

Nevertheless, in many countries, such policies may not prove to be as successful now as they might have been ten years earlier. This is, in part, because the aggregate enrolment response to user charges will depend upon the extent to which the net private returns (both monetary and non-monetary) continue to outweigh those from alternative dispositions of savings and student time. The assumption made by most advocates of user charges at tertiary level is that these returns would remain high enough, even after the imposition of fees for higher education, to remain a rational personal investment. Yet most of the evidence upon which this assumption is based uses earnings data from the 1960s and 1970s, and does not accommodate the strong reductions in real earnings and in earnings differentials between university graduates and other workers, which have been a characteristic of the 1980s in many developing countries. For example, in a sample of eight African countries, the average differential in starting salaries between university graduates and secondary school leavers was reduced by 32 per cent between 1975 and the late 1980s (Colclough 1991:207). Thus, as argued elsewhere (op.cit: 203-208), the existing rate-of-return studies for Sub-Saharan Africa - upon which strong proposals for cost recovery continue to be based (World Bank 1988) - may substantially over-estimate present private returns, and may no longer provide an accurate guide to the magnitude of enrolment response to the introduction of user charges. Given the very widespread economic difficulties experienced in developing countries during the last decade, and the changes in real earnings which adjustment policies have often implied, conclusions which presuppose that relative prices have remained unchanged over that period are a fragile foundation upon which to base changes to current economic policy.

As to the second set of arguments, there is a growing literature which specifically makes the case for a transfer of public resources from the top to the base of the education system in developing countries. The application of fees at tertiary level is often part of the case which such authors advance[10]. Mingat and Tan (1985) estimate the impact on primary

[10] This is not, of course, a necessary part of such arguments, in that the public sector could in principle simply withdraw from making further (or any) tertiary provision. The arguments and evidence opened up by this set of possibilities are reviewed later in this paper.

enrolments of reducing tertiary subsidies in Africa by various amounts. Although such resource shifts would be insufficient to achieve UPE in most countries, their simulations show that a sizeable impact upon primary enrolments could be attained, particularly in Francophone states. The World Bank estimated that eliminating living allowances provided to tertiary students in 12 African countries would increase primary education budgets in those countries by, on average, about 18 per cent. Further the impact of full cost recovery (living allowances plus operating costs) could raise public resources for primary schooling by around 40 per cent (World Bank 1986).

These types of calculation are useful, in that they explicitly recognize that the equity benefits of introducing user charges depend strongly upon the uses to which the revenues so gained are put. There would be no equity gain, for example, if these revenues were used to finance subsidies which were captured by members of the same (or higher) income groups as those paying the fees. However, this general point remains true whether the increment of public spending so financed were spent on other aspects of education (including primary schooling), or on other things. Expanded coverage of primary schooling , or qualitative support to poorly endowed schools will each help the poor. But further support to richer, better endowed urban schools may not. Thus, the redirection towards primary schooling of resources generated by user fees is a necessary but not a sufficient condition for an improvement in equity to be achieved.

Loans and Scholarships

The main equity and efficiency costs of user charges at tertiary levels arise from the extent to which they would prevent bright children from low income households from continuing to pursue their studies. Although the problems here are less pronounced than those raised by fees at primary or secondary school levels, they remain significant. This is because, even in countries where, in the absence of fees, only the rich gained access to tertiary studies, their introduction, whilst not directly harming the poor, would confirm their continued exclusion. The usually recommended solution to this problem is that credit should be available for all who gain access to higher education. Further, for those who are particularly deserving - using a mix of ability and income criteria - scholarship programmes should be designed (Mingat and Tan 1986c; World Bank 1986; Jimenez 1987; Chutikul 1987; Carlson 1992).

The literature on student loans is large and experience with different types of programme is now considerable. No comprehensive review will be given here (such can be found, together with the case for an alternative approach, in Colclough 1990), but the main lessons of this experience will be summarized. Woodhall (1983) suggests four particular advantages stemming from the introduction of loans for higher education students. First the reduction in the publicly incurred costs of higher education in the long run allows governments to expand access, to reduce the financial burden on the state, or to redirect scarce financial resources elsewhere in the education system. Second they reduce the transfer of income for poorer tax-payers to those with higher than average incomes. Third, the fact that students are financing a higher proportion of the costs of their studies will increase the diligence and efficiency with which they approach their studies. Finally loans allow greater flexibility in the use of educational resources than a system based entirely upon grants extended to a relatively privileged minority of the population.

The first student loan programme appears to have been established in Colombia in 1953. By the late 1980s more than 30 developing countries were operating loan schemes, with varying degrees of success. Many have had weaknesses from the point of view of revenue generation. Evaluations of experience from a large number of countries reveal that loan schemes do not usually become self-financing owing mainly to high default rates, or to unemployment or voluntary non-participation in the labour force - which latter two categories usually excuse the debtor from the obligation to repay. In addition the costs of administering loans schemes can be high, particularly in countries without a well developed banking sector. Further, in many countries the political problems of reducing subsidies turn out to be too high owing to the interests of the more powerful and articulate groups in society being offended[11].

Equally, loans do not solve a public financing problem in the short run. For example, if loans were typically taken out to cover four years of study, with a twenty-year pay-back period, the government would not recover even 50 per cent of the initial crop of student loans until fourteen years after the start of the scheme. Thus, even in the absence of high levels of student default on repayments, loans schemes do not provide an easy or quick source of financial savings to government, owing to the length of time necessary for repayments to build up.

---

[11] Evidence for these judgements can be found in Jallade 1974 and 1978, and Woodhall 1983 and 1988.

In addition, although it is true that loans schemes mitigate the negative consequences upon equity (and efficiency) of user charges, they are nevertheless more costly to the student than the present typical structure of subsidies. By consequence, whatever inequities of access to higher education presently exist would be further increased as a result of student loans, in that the poor are more risk-averse than the rich. The only escape from this would be to provide scholarships to allow the poor continued access along present lines. One solution, favoured in the past by a number of European countries, would be to introduce means-tested fees, with none payable by families below a given income level; at higher incomes, contributions would increase to a maximum amount, payable directly by parents, or, alternatively, financed under a loans scheme by the student concerned. Equity would here be maintained, in comparison with the status quo, but the introduction of such scholarships on the basis of means tests further undermines the revenue-raising objectives of user charges.

Alternative Revenue Measures

The most important source of finance for education throughout the world remains the general revenues raised by governments via taxation. It is, therefore, important to ask whether additional, non-conventional revenue sources, such as user fees, are in fact required. The practicality of levying user charges seems, on the basis of the evidence reviewed above, to be somewhat more complex than that of increasing existing levels of taxation. Are there other reasons, then, for their being preferred?

One argument raised by Jimenez (1987) and others is that since, in any case, tax systems in many developing countries are regressive, raising additional revenue through general taxation would be as harmful to equity as would raising it via user charges. However, the evidence for the charge of regressivity is not stated, and a perusal of the relevant literature suggests that it probably does not exist. It is true that individual income taxes - the major instrument for achieving progressivity - provide a smaller proportion of total tax revenues in poor than in rich countries[12]. But these differences are due to the combination of high tax avoidance and high levels of exemptions in developing countries, since marginal tax rates are frequently as high in poor as in richer countries (Tanzi 1987:224).

---

[12] In 1981, for example, individual income taxes accounted for 10.3 per cent of total tax revenues in eighty-six developing countries, compared with 32.8 per cent in OECD countries (Tanzi 1987:224).

No recent comprehensive review of the comparative incidence of tax burdens in developing countries appears to be available[13]. This is partly because the technical requirements for such studies, even at the level of individual countries, are considerable. Meanwhile, statements asserting the ubiquity of regressive tax systems in developing countries need to be received with some care.

In any case, this point of view fails to distinguish between average tax incidence and changes in taxation at the margin. The progressivity of existing direct and indirect taxation is frequently changed in response to political, economic and financial circumstances. For example, recent tax reforms in Chile increased government revenues by about 10 per cent in 1990 and 1991, and accounted for about 1.5 per cent of GDP. These revenue measures were designed to be progressive, and, in terms of their subsequent allocation, it has been estimated that about two-thirds of the resources generated reached the poorest 40 per cent of the population - mainly via public expenditures upon social security, education, health and housing (Schkolnik 1992). Similarly, in Mexico, an already progressive structure of tax incidence was made more so in 1980 by a reform which was introduced specifically to distribute the tax burden more equitably (Gil Diaz 1987). Thus, government fiscal instruments are obviously not constrained to change tax rates equally across the board. Indeed, that hardly ever happens. The very fact of present regressivity does not provide adequate reason for avoiding consideration of how to raise additional revenues in more progressive ways.

As indicated in the first section of this paper there are strong *a priori* arguments for continuing to depend on general taxation as the main way of funding education. By using this instrument, the risks of under-investment arising from the presence of externalities, and the other characteristics of education which make it a 'quasi-public good' can be minimised, if not avoided altogether[14]. On the other hand, Ministries of Finance are generally reluctant to introduce tax measures which earmark the resulting revenues for defined purposes. There is an understandable wish to avoid the lack of fiscal flexibility which earmarking (if it were to become substantial) might impose. There have, nevertheless, been many countries which have introduced special taxation measures for the purpose of raising resources for education.

---

[13] In fact, earlier studies (Bird and De Wulf 1973, De Wulf, 1975) suggested that tax systems were generally mildly progressive.

[14] Jallade's (1978) assessment of financing choices, based upon Latin American experiences leads him to a similar conclusion.

Earmarked taxes have been used in Nepal, China, Botswana, and Turkey in order to finance school expansion programmes. In 1986, Pakistan introduced a surcharge on some imports, designating the proceeds for use in the education system. In Brazil, a tax amounting to 2.5 per cent of the wages of employees in the private sector is levied by the government, and earmarked specifically for primary schooling. In 1982, Korea introduced a five-year education tax on the sale of tobacco, and on income from interest and dividends. By 1987 this tax financed about 15 per cent of the expenditures by the Ministry of Education, and it was renewed for a further five-year period at that time[15].

There is obviously a wide range of taxation alternatives which faces an administration requiring more money for education. The choice made will depend upon the characteristics of the economy and the fiscal objectives of the government concerned. In the context of the general debate about fees, loans and scholarships, however, the relative advantages of graduate payroll taxes have been largely ignored. Such a tax would be paid by the employers of graduates, and calculated as a proportion of the salaries paid to them by each employer. A tax on the employment of graduates of this kind would have a number of advantages over a student loan scheme, even where loan repayments and payroll tax dues were based upon the same percentage of salaries earned in each case.

First, although the payroll tax would raise labour costs, the overall impact would be small, since graduates seldom comprise more than 3 or 4 per cent of total employment. Nevertheless a tax on graduate employment (of, say, 10 per cent of salaries paid) would provide considerable incentives for employers to economise in the use of graduate workers. In countries where such workers were in short supply such incentives would be useful. Second, since the tax would have a downward impact upon graduate salaries (as opposed to an upward impact in the case of student loans) the rate of return to tertiary education would be reduced. Third, although graduates would pay part of the costs of the tax through lower salaries (and lower employment), they would not be aware of so doing. Thus the disincentive effects of fees and loans for the progeny of poorer households would be avoided. Finally, it can be shown that the revenue-raising potential of a graduate payroll tax is

[15] For discussion of these and other initiatives see Lockheed and Verspoor 1991: 189-206.

considerably greater than that of student loans schemes, and that, in general, it is much to be preferred on financial grounds[16].

Private Education

A further potential solution to the financing problems in the education sector faced by many developing countries, is to encourage the development of private education for those people who are willing to pay. There are many different models of private education. Here, however, we imply full ownership and management of the institutions concerned by the private sector, including, at one extreme, circumstances where all the costs of operation are met from private sources. In fact, however, there are few institutions which satisfy this criterion completely. The state usually subsidizes the private sector - at least to the extent of meeting curriculum development, inspection, examining and teacher training costs, and very often in much more substantial ways. Nevertheless, under most variants of private education, a considerable part of the cost-burden of the institutions concerned is transferred from the State to private households. They differ from cost-recovery approaches, in that they do not usually monopolize the whole system - private and public schools and colleges usually exist side by side. For this reason, advocates of private education in developing countries often argue that it is more suited to dealing with excess demand, in ways compatible with equity objectives, than are other cost-recovery approaches. Since there is no compulsion, those who pay do so voluntarily. This would seem, by definition, to be conducive of greater welfare than under cost-recovery alternatives, where charges are imposed upon everybody.

Private schooling

Historically, the balance between public and private schooling in developing countries has always been partly influenced by the financial capacity of States. In Africa, for example, private schools have existed in considerable numbers over the past century. They were generally run by the missionary societies, who responded both to the reluctance of colonial

---

[16] The case for payroll taxes in comparison with student loans is examined in some detail in Colclough 1990. Calculations presented there show that, taking a 10-15 year perspective, the present value of revenues from a payroll tax exceed those of a loans scheme - even in the face of extremely optimistic assumptions about the efficiency of the loans administration and the absence of default.

administrations to spend scarce resources on domestic education systems, and to the opportunities to convert populations to Christianity via schooling. Later, and associated with the rapid expansion of formal schooling which occurred throughout Africa after independence, many countries again witnessed a substantial increase in enrolments in private schools. These were of a different character from their mission antecedents. A small proportion of these schools were elite institutions - often founded with the needs of expatriate children in mind - charging fees which placed them well out of reach of the ordinary citizen. The majority, however, particularly those at secondary level, were 'second chance institutions', charging modest fees but enabling children who were unable to gain access to the public secondary system to go to secondary school. The Kenyan approach, based upon self-help 'harambee' institutions was more successful than most in providing a system which, though inferior, was not too far behind the state school system[17]. Elsewhere, however, private secondary schools were generally of very low quality, offering little chance for their students to succeed in public examinations, or of transferring to higher levels of education after leaving. This was as true of those private schools established during the 1960s and 1970s as of the newer wave of schools established during the 1980s in response to stagnation of public schooling and falling educational quality (see, for example, Kaluba 1986 for a discussion of the Zambian case).

Outside Africa, also, many countries decided to encourage the private sector as a means of meeting unsatisfied social demand for schooling. Sri Lanka is an interesting example of a country which gained a great reputation for its early establishment of strongly re-distributive social policies, including in education, where free schooling for all was introduced in 1945. No tuition fees were charged at any level of education, nor were there charges for equipment. Free textbooks to all students in grades 1 - 10 was also incorporated from 1980 onwards. The costs of free education for all were high. Spending on education rose from 2.7 per cent of GNP in 1952 to almost 5 per cent in 1964, since when its proportional allocation has fallen back towards 2.5 per cent.

This more recent exercise in restraint was achieved in a number of ways. From 1972 onwards the period of compulsory schooling was reduced from 10 to 8 years, and following the publication of a White Paper on Education in 1981 (Government of Sri Lanka 1981), a

---

[17] It is true that the examination results achieved by harambee schools have been far behind those of the government maintained schools. But the quality of student intakes were much lower in the harambee system, which partly accounts for their relatively poor performance (on this, see Lillis and Ayot 1988:125-8)

further range of economies was introduced. These included enabling legislation for the introduction of private primary and secondary schools, universities and colleges, which were henceforth allowed to charge fees. Some were subsequently established at secondary and tertiary level. It is reported, however, that the level of fees charged is such that they are institutions patronised only by the rich (Wanasinghe 1988). An elitist element in the system has thus been allowed, as means of reducing the costs of universal provision to the state. However, it is not clear how much money is saved by these means, nor whether the policy is less influenced by economics than by political pressure from elite groups who wish to be able to provide superior education for their own children. The latter is more likely, according to Wanasinghe (1988).

In Argentina and Philippines, too, private schooling is reported to be a contributor to socio-economic differentiation (Kugler and McMeekin 1991, Roth 1987). In the case of Argentina private schools are entitled to have their regular teacher payroll reimbursed from public funds. About 20 per cent of the education budget is allocated in this way, in spite of the fact that private schools are used by the middle and upper classes, many of whom would be prepared to pay increased fees. But from the government's point of view, the subsidy has a positive impact on quality at much lower cost than in the state education sector.

Thus, the conditions of private schooling, and the social and economic roles which private schools play in society differ between countries. What is true of the 'second chance' institutions of Africa, is unlikely also to hold for the elite private schools in Sri Lanka. Nevertheless, neo-liberal writers have increasingly argued that such generalizations can be made, at least in so far as economic efficiency is concerned.

Two important arguments tend to made. These are, first, that the removal of restrictions on the private sector will increase the quantity of educational provision, thereby mobilizing funds which would otherwise not be available, and liberating some public resources for use by other children[18]. This argument is plausible, and there is some limited evidence that it works in practice. The comparison of the educational history of Kenya and

---

[18] There is an important sub-category of argument in this debate - which will not be covered in detail here - concerning the different means of financing private schooling. One important set of questions concerns whether private schooling can be made compatible with equity objectives by devolving responsibility for raising monies to communities rather than to individuals. In fact, community financing often turns out to be as regressive as other private schemes, since charging fees may be the only way of raising the resources required. However, a number of countries have evolved approaches to community schooling which soften the negative equity impact of purely market-based approaches. See Bray with Lillis (1988) for a review of country experience.

Tanzania supports the case (Knight and Sabot 1990): the much higher educational attainment of Kenyans derives partly from the more relaxed attitude towards the growth of private schools which was taken by the Kenyan Government since the 1960s than was the case in Tanzania (where private education was banned, and the growth of public secondary schooling was slow). Equally, the experience of Pakistan during two strongly contrasting policy periods, suggests that enabling private schools to operate was instrumental in widening educational opportunities at both primary and secondary levels (Jimenez and Tan 1987).

The second argument, which is critical to the neo-liberal case for private schooling, is that the cost-effectiveness of private schooling is greater than that in the public sector. This argument is important not only for the advocacy of private schooling as an optional extra to the public system, but, more seriously, to the case for the privatization of existing schools within the public sector, which is increasingly part of the neo-liberal agenda. In the USA a major debate about the relative efficiency of public and Catholic private schools was initiated more than a decade ago, when a comparative study suggested that Catholic schools in the private sector were more cost-effective (Coleman, Hoffer and Kilgore, 1982). The results proved controversial owing to methodological difficulties, and their implications remain contended by some analysts[19]. Even if this were not the case, it would be invalid to draw conclusions from this work for policy on private schooling in developing countries. Accordingly efforts have been made, in recent years, to conduct comparable research in developing countries which addresses these questions.

Studies in Colombia, the Dominican Republic, Philippines, Tanzania and Thailand have been completed (see Jimenez, Lockheed, Luna and Paqueo 1989, Jimenez, Lockheed and Wattanawasha 1988, Jimenez, Paqueo and de Vera 1988, Cox and Jimenez 1989, and Psacharopoulos 1987. They show that, in these countries, private school students generally outperform public school students on standardized maths and language tests. This finding remains after controlling for differences in the socio-economic backgrounds of the two groups of students, and after correcting for sample selection bias - i.e. for the possibility that the ability (or other characteristics affecting achievement) levels of the two groups of students differ systematically, even after holding socio-economic background constant. Since, according to these studies, the unit costs of private schools are lower than their public school

[19] For a review and attempted resolution of the technical controversy see Murnane, Newstead and Olsen 1985.

counterparts, the authors conclude that private schools appear to be more cost-effective than public schools (Jimenez, Lockheed and Paqueo 1991).

There are a number of reasons to doubt these conclusions. Although, from a technical point of view, the authors of these studies appear to have extracted as much mileage as possible from the information available to them, the data employed are in some respects too weak properly to confront all of the questions which the authors wish to pose.

The first problem concerns whether or not it is helpful, analytically, to distinguish between, and compare, public and private schools in this way. If each category were relatively homogeneous, and if they were genuine alternatives (i.e. if both were doing roughly the same job) the answer would be in the affirmative. There are reasons to believe, however, that this is often not so for public and private schools in the sampled countries.

In the Colombia/Tanzania comparison (Psacharopoulos 1987), for example, the sample of schools in both public and private sectors included many which specialised in different subjects. These included schools which offered commercial, industrial, and agricultural as well as academic curricula. These specialisms were given different emphases from school to school. Yet the cost comparisons are not disaggregated to indicate relative costs for schools with a similar balance of subject specialisms. Rather, they are given only for the public and private categories taken as a whole. This would not matter if the relative subject balance as between the two sectors were roughly equal. But it is not. In particular, the private sector is reported to have much lower levels of resources per student in the vocational specialisms than do similar government schools. Thus, the fact that unit costs emerge as being lower in private than in public schools in both of these countries may be more a reflection of the different resource inputs into vocational subject teaching than of any significant difference in inputs to academic subjects.

This possibility is strengthened when one learns that, although the private sector schools have a greater impact upon academic test scores than public schools in both countries, the scores for commercial, technical and agricultural subjects were quite strongly worse in the private sector. It seems more than plausible, therefore, that public schools do better at vocational subjects in part because of the availability of better, more expensive equipment and teachers for technical skills. The higher level of resourcing for vocational subjects could explain a large part of the overall higher costs of public secondary schools, and the higher achievement of vocational students therein. In the absence of separate cost data for schools specialising in academic and vocational subjects, therefore, little can be said on

the basis of these results about the relative effectiveness of public and private secondary schools.

The later treatment of the same data by Cox and Jimenez (1990) improves the analysis presented by Psacharopoulos in a number of ways - most notably by including more explicit consideration of selection bias - but the basic interpretive problem posed by the data remains unaddressed. The authors focus only upon the differences in achievement for students in the academic streams of the schools in the sample. They confirm that, in the case of both countries, private schools offer an achievement advantage, after standardizing for differences in a range of student and school attributes.

On the other hand the analysis uses only a limited range of school-related variables: mean teacher salaries, and student-teacher ratios being the only ones. There are other differences between schools which could be expected to affect cognitive achievement, - such as inter-school differences in the availability of books, teaching materials, science facilities, teaching hours, etc.[20]. In other words, we know little more about **why** the achievement advantage offered by private schools occurs. The possible explanations are not limited to the views that they are in some sense more efficient or that the students work harder because they are paying for the service. Since, again, we are not told how recurrent costs of academic streams compare between the two sets of institutions, it may simply be that the school resources available are higher in the private sector. Thus, the jury remains out.

A further source of difference between public and private schools which is likely to lead to quite unequal unit cost outcomes (irrespective of the relative efficiency of the two sectors) is that private and public schools may be dissimilar products. In Thailand, for example, Tsang and Taoklam (1992) find that it would be a mistake to treat private and public schools as two homogeneous and comparable categories. Public primary schools are mainly small rural schools with low class size and high teacher costs. High unit costs in these schools are heavily determined by population density rather than by whether or not the schools are private or public. If public and private schools in metropolitan areas (where most private schools are to be found) are compared, the per student costs emerge as being very

[20] Similar criticisms can be made of the study for the Dominican Republic (Jimenez, Lockheed, Luna and Paqueo 1989). In that case the private school advantage is reduced to negligible proportions after taking account of student/teacher ratios, some teacher characteristics, the socio-economic background of students and average ability levels of pupils in the different school settings. Classroom resources again remain unmeasured and the cost data are incomplete.

similar. These considerations were not raised in the Thailand study (Jimenez, Lockheed and Wattanawaha 1988), yet they seem serious enough, at least in principle, to be capable of reversing the private school cost-effectiveness advantage, suggested by the authors, to favour public schools instead.

It is not clear to the present author that the central question about relative cost-effectiveness will ever be satisfactorily answered. We wish to know the value added by one unit of resource of private education, versus public, for individuals with identical characteristics. We have seen that value added is seldom measured; the cost data employed have been incomplete; important school-related variables are omitted; many of the schools included in public and private categories appear, in practice, to belong to non-competing groups. On the other hand, the above work does show that private schooling, in some developing countries, is capable of producing results which are worthwhile, and comparable (using cognitive achievement criteria) to those of the public sector. The evidence is not strong enough to indicate the desirability (on efficiency or, indeed, any other, grounds) of privatizing existing public school systems. But it does lend support to the more modest judgement that, in countries which are resource constrained, and where excess demand for secondary education remains high, allowing the private sector to meet part of that demand could result in increased levels of enrolment, in schools of adequate quality, at no additional direct cost to the poor.

Private initiatives in higher education

Enrolments in private higher education institutions in developing countries have grown rapidly in recent years - sometimes, as in Colombia and Peru, considerably faster than those in public institutions. In many countries, including Philippines, Korea, Japan, Indonesia, Colombia, Cyprus, Burma, Bangladesh and India, such enrolments were, by the late 1980s, more than half the total for higher education as a whole (Tilak 1991:Table 2). This has occurred for two main reasons: first, there is excess demand for higher education, over and above what is provided by the state; second, there is a demand for higher quality (or different) education than that which is publicly provided. As in the case of private schooling, however, there are sharp differences between both the availability of private higher education, and the reasons for its historical development as between different parts of the world. Some of these differences need to be understood before allowing ourselves

generalizations about its nature and impact. The cases of Africa and Latin America will be briefly considered.

Private enrolments in higher education in Africa are mostly very low. They account for only a small proportion of university enrolments on the continent. Eismon (1992) reports that there are about thirty private degree granting colleges and universities in at least six SSA countries: Kenya, Madagascar, Niger, Rwanda, Zaire, Zimbabwe. The total enrolment in these institutions is perhaps 5000 students. In most of these countries, state registration of private institutions and recognition of programmes has proceeded on an ad hoc basis. Only in three countries (Kenya, Nigeria and Zimbabwe) has provision been made for the accreditation of private institutions to allow evolution into autonomous universities.

The largest number of private institutions are to be found in Kenya, where eleven private universities and colleges have been registered by the Commission for Higher Education. In the late 1980s, enrolments in these institutions amounted to some 2000 students, or about 5 per cent of total university enrolments in Kenya. Although many of these, founded by religious groups, trained specialists for the educational, social and pastoral services of their sponsoring organizations, several offered a wide range of academic and professional programmes and admitted students from other faiths. Unit costs were generally high, but varied strongly amongst institutions: from around US $1600 to US $4000 at that time. Nevertheless, demand for places exceeded supply, and total costs were not dissimilar from those of public institutions.

By contrast, private higher education in Latin America is much more significant. Although, in 1930, only about 3 per cent of total Latin American enrolment at university level was in the private sector, by 1955, the figure had grown to about 14 per cent. By 1975 about one-third of total enrolments in Latin America were in private universities, since when the proportion has stabilized. Even without Brazil, which has particularly large private enrolments of over 1 million students, about one-fifth of those in other countries are in the private sector.

Although not all countries' experience is the same, Levy (1986, 1989) argues that private institutions in Latin America have generally served different ends to those in the public sector. A first wave of expansion (c.1940-60) was spearheaded by the Catholic church which, dismayed by the increasing secularism of the public universities, set out to re-establish older values. A second wave, during the 1960s was spurred more by dissatisfaction with the public universities, which no longer conferred elite status upon those who attended.

Secondary and, subsequently, tertiary expansion opened the public universities to the middle and lower classes, and academic standards were perceived to fall. New, private universities were increasingly expected to restore earlier standards, and - not incidentally - access to the best jobs. Finally, during the 1970s and 1980s a third wave of expansion, led by non-elite secular institutions occurred. Here, the vocational aspirations of the elite were less the driving force than those of the majority of the population who remain excluded from university education. More recently, then, it was not the damaging effect upon quality caused by rapid public sector expansion which provided the touchstone, rather it was that such expansion had not been rapid enough.

> 'The two most striking cases of non-elite private growth are found in Brazil and Colombia, probably followed by the Dominican Republic and Peru. The restrictiveness of public sectors in the first three is suggested by the low percentage of the cohort group in higher education in 1960, against a Latin American average of 3.1: Brazil 1.6, Colombia 1.7, and the Dominican Republic 1.3 - but 3.6 for Peru.' (Levy 1989: 106, fn.13)

It seems that the goals of these private universities have been, to an important extent, achieved. The elite universities have consistently delivered the best employment prospects, whilst the rest show demonstrated economic returns. But not only have the constituencies who use them been served: so has the state. This is so in that the support of key population groups has been maintained in the face of an unsatisfactory public university system. Second, personnel for jobs in the state apparatus have often been supplied by the private sector. Third the private sector has been free of the left wing activism which long characterized the public universities. Finally, the private sector is basically self-financed, thereby relieving the state of a major financial burden. Although governments have tried to get public universities to increase their income from non-government sources, they have met with very little success. Tuition fees, for example, are almost always absent - or at the least nominal.

The faults of these institutions concern equity goals - which are obviously not served. The quality of the non-elite third wave is often low. But, on balance, the reputation of the Catholic universities, and of the elite private universities is sufficient, in Latin America, to give the private sector the edge in terms of quality in the majority of countries. On the other hand, this prosperity was gained partly by drawing away from the public sector many of the brightest students, and it does not follow that, from an efficiency (still less an equity) point

of view, further dependence upon the private sector would necessarily be best. Their goals have often been achieved, but they are more limited than those set by the public sector. Assessments of success therefore are partly dependent upon normative perspectives.

Levy's work shows that, as in the case of the school system, there is great diversity amongst private higher educational institutions - so much so that grouping them together under the heading 'private' risks concealing as much as it reveals. Partly as a reflection of this, there is little evidence that private universities can be said, in general, to be qualitatively superior, to deliver better job access, or to be more cost-effective.

A recent review by Tilak (1991) shows that expenditures per student in private universities are often substantially lower than in the public system (with the exception of the US, where the elite private institutions are usually much more expensive than the state colleges). Drop-out rates are higher in the private sectors of Thailand, and Philippines, failure rates are higher in Colombia, and quality is judged lower in Indonesia and India. Unemployment rates are higher amongst graduates from private universities, than from their public counterparts, in Philippines, Thailand and Cyprus. Private rates of return also seem to be higher for graduates from public universities in Thailand, Philippines and Japan (Tilak 1991:Table 5).

As with policies governing private schooling, the strength of the case for facilitating the growth of private institutions of higher education is mainly based upon the financial relief which it can provide for the government. This, in turn, could finance increased enrolments at tertiary level, or, with redistribution of resources, at lower educational levels. In practice, however, private colleges and universities are usually in receipt of subsidies for student bursaries, or for reimbursement of direct expenditures of various kinds. These can account for up to 90 per cent of the recurrent expenditure of private institutions. In such cases, then, the financial savings provided by private higher education may be quite small.

The case of Chile, however, is worthy of special attention in this context. A number of studies document the introduction of important reforms in higher education (Schiefelbein 1990; Freid and Abuhadra 1991; Casteneda 1992) which were intended to generate new resources for education and to allow a more efficient and equitable distribution of educational resources. The main policy changes, introduced in January 1981, were as follows:

- traditional universities would have to compete among themselves, and with a range of new private institutions, including professional institutes and technical centres, which were to be established;

- universities would henceforth depend upon tuition fees as the only means of gaining additional finance;

- loans were to be available for all students;

- public funds would be given to higher educational institutions in proportion to their ability to attract the best students.

After many years of tight government control, enrolments in higher education doubled between 1980 and 1989, as a result of the policies to stimulate private education. Students in higher education reached 233,000 by 1989, amounting to 19 per cent of the 18-22 years age group, of whom 126,000 were in the universities (up from 100,000 in 1981).

Over the 1981-89 period private funding of higher education increased from negligible amounts to about US $55 million per year. Meanwhile, the public contribution was reduced from US $171 million to US $115 million over the same period. Public support to the universities comprised: direct institutional support (65 per cent), indirect support in the form of financial aid to students (24 per cent), and support in the form of performance incentives (11 per cent) to enrol higher proportions of the most highly qualified high school graduates. By the late 1980s, all universities charged significant student fees, accounting for about 25 per cent of their total income (and about 60 per cent of unit instructional cost after deducting research and paid services). Over half of the income from tuition fees was obtained via student loans, but provision of financial assistance to low income students remained poor.

In view of our earlier comments about loan schemes, it is worth noting that the changes in the funding system for higher education in Chile led to problems with student loan recovery. The 1981 reform established that all students able to prove that they or their families could not afford to pay fees were eligible for loans. These were to be repaid in 10-15 years, with a two-year grace period after graduation - except for those who dropped out, who would have to start payments the following year. About one-third of the student body have received loans. Repayments from the first cohort of students started in 1989, but

Schiefelbein (1990) reports that the default rate has been over 40 per cent. In 1990 there were 30000 default cases subject to judicial collection. Many of these cases were students who had dropped out of their courses early and had not found work. They were unable to pay, in spite of the court orders against them.

This approach towards funding higher education has led to some other equity problems. First there remains a lack of opportunity for the poorer students: half of all higher education students are from the top quintile of the income distribution, whereas only 5 per cent are from the lowest quintile. Second, a high proportion of the public resources allocated to public higher education is captured by the wealthier groups in society. Third, there remain unequal opportunities of access to good higher education amongst the sexes and as between rich and poor regions of the country.

Nevertheless, the impact of the reforms upon the overall distribution of educational resources has been positive. There has been a sharp reduction in public spending on the universities: direct contributions fell by more than 50 per cent between 1980 and 1987 (Casteneda 1992). Thus, enrolments have increased substantially at much lower public costs. The savings made enabled a significant redistribution of public spending from the top to the base of the education system. Although a sharp financial crisis in 1982-85 resulted in reductions in public spending, including on education, the ratio of public expenditures on non-university education to GDP remains considerably higher than it had been during the 1970s. This was a direct result of the 1981 reforms.

Thus, notwithstanding all the remaining problems, Chile does provide an example of a country where the encouragement of private institutions of higher education, and the introduction of fees for the rest, has resulted in a real redistribution of public resources to provide expanded quality and access to pupils at lower educational levels. It may be true, as suggested earlier, that in some countries this will not happen owing to the mechanics of public budgeting preventing cross-subsidization within sectors. But at least the case of Chile shows that such financial re-direction is neither technically nor politically impossible, and it gives support to those who wish to see more generalized reforms which aim to reallocate resources from the top towards the base of education systems in the developing world.

IV. CONCLUSION

The neo-liberal critique of the orthodox case for the public provision of fee-free education has provided a useful challenge. However, the empirical basis for the effectiveness of its prognoses remains weak. The following points summarize the argument of this paper.

The distribution of public expenditures on education is unequal, in the sense that not everyone receives equal amounts. But this does not necessarily imply that such expenditures are regressive. In a sample of countries for which data are available the net impact of public expenditures, for broad income groups, appears to be mildly progressive, even though, in most of those countries, the majority of tertiary enrolments comprise children from richer households.

The imposition of user fees for attendance at primary and secondary schools would increase enrolments at those levels only if the revenues so gained were spent on the provision of new school places, if there were excess demand for schooling, and if the fees were not so high that the negative enrolment response amongst the poor exceeded the positive response from those who were willing and able to pay. Even if these conditions were met, many amongst the bright poor may withdraw from school, with negative consequences for both equity and efficiency. A scholarship policy to protect the poor would be needed, which may substantially undermine the revenue raising objectives of user charges. On the other hand, if low enrolments were caused by demand deficiency, any increase in private costs would reduce enrolments further.

Those authors who use the logic of revealed preference to demonstrate a 'willingness to pay' for schooling even amongst the poor, risk confronting logical contradictions arising from the general equilibrium implications of their proposed policies. Their arguments justify cost-recovery only for schools serving some of the poorer communities. This implied partial approach to fee incidence would bring wider equity and efficiency consequences, which are not analysed. The income effects of user charges and their implications for the consumption of other necessary goods are also not confronted by the simulations of 'willingness to pay'.

The case for user charges at tertiary level is stronger, both because it may be plausible (although no supporting evidence exists) that the incidence of externalities is less at tertiary level than in the case of primary schooling, and because the service is presently mainly used by the progeny of the rich. Nevertheless, major equity and efficiency problems

still arise. For example, the neo-liberal argument assumes that the enrolment response to charges will be muted owing to the high rates of return which hold for tertiary education. Yet almost all the extant rate-of-return evidence pre-dates the sharp wage and salary declines which have occurred in much of Africa and Latin America during the 1980s. The enrolment response to charges in some countries is likely to be severely negative.

Equally, the introduction of charges at tertiary level would offend equity principles (irrespective of the aggregate enrolment response) unless the poorer families were supported. That the poor do not use tertiary facilities at present is not entirely true, and even if it were true, charges would merely reinforce the existing dimensions of unequal access. Scholarships would, therefore, be needed for the poor, merely to protect the *status quo ante*: improvements in equity would need even larger subsidies than at present to compensate for perceived opportunity costs amongst the poorest groups.

It is clear, then, that loans and scholarships would be required if the negative impact of user charges on equity and enrolments were to be minimized. But the revenue impact of loans schemes is poor, particularly during the first decade of their operation. A quick and sharp impact upon public revenues is not obtainable via these means.

The challenge of raising more public resources for education should mainly be addressed by increasing levels of direct and indirect taxation, in ways which move the balance of tax incidence in a more progressive direction. In addition, payroll taxes for graduates (and other highly skilled workers trained at public expense) provide a potentially more effective and equitable means of raising additional resources for education than do user charges, supplemented by loans, at tertiary level.

Our assessment of the evidence on private education indicates that allowing private schools, colleges and universities to develop can liberate resources which can be utilised elsewhere in the public education system. The existing evidence on the relative cost-effectiveness of public and private schools is not strong enough to justify measures to privatize state systems. But, where private systems are allowed to grow they will probably provide adequate value for those who wish to enrol. There is evidence, however, from many countries, that private systems are often used by the richer groups in order to maintain their elite status. The acceptability of this would depend upon local perceptions of the opportunity costs of the resources thus saved by the state, and upon the availability of viable fiscal alternatives.

Finally, 'new political economy' arguments which predict that governments are likely, in education as in other aspects of domestic policy, to pursue solutions which reward the interest groups upon which they depend for power, can be used to attack central parts of the neo-liberal case as effectively as that of the earlier orthodoxy. Thus, there is no reason to suppose that governments will be any more likely to introduce user charges at tertiary levels, mitigated by loans and scholarships, than they are to pursue any other pro-poor policies. There is, in any case, much evidence from around the world that some governments can and do intervene in order to make more progressive the net incidence of taxes and subsidies, and to shift educational resources away from the top towards the bottom of the system - as, on both counts, the recent experience of Chile testifies. These and similar cases need particular study. There can be no *a priori* resolution of whether market-failure is worse or better than government-failure. Both exist, and an empirical approach is mainly needed to assess outcomes.

BIBLIOGRAPHY

Armitage, J., and Sabot, R. (1987), "Efficiency and Equity Implications of Subsidies to Secondary Education in Kenya", in Newbery and Stern (1987:589-614).

Bird, R.D., and De Wulf, L.H. (1973), "Taxation and Income Distribution in Latin America: A Critical Review of Empirical Studies". *IMF Staff Papers*, 20: 639-82.

Bray, M., with Lillis, K. (eds.) (1988), *Community Financing of Education: Issues and Policy Implications in Less Developed Countries*. Oxford: Pergamon Press, for the Commonwealth Secretariat.

Carlson, S. (1992), "Private Financing of Higher Education in Latin America and the Caribbean". *Report No.18*, Latin American and Caribbean Technical Department, Regional Studies Programme. Washington, DC: World Bank.

Casteneda, T. (1992), *Combating Poverty: Innovative Social Reforms in Chile during the 1980s*. San Francisco: International Centre for Economic Growth.

Chutikul, S. (1987), "The Economics of Education Subsidies and the Effect of Fee Increases: A Case Study". *Discussion Paper Series* No. 93. Bangkok: Faculty of Economics, Thammasat University.

Colclough, C. (1990), "Raising Additional Resources for Education in Developing Countries: Are Graduate Payroll Taxes Superior to Student Loans?". *International Journal of Educational Development*, Vol.10, No. 2/3 pages 169-180.

_____ (1991a), "Structuralism versus Neo-liberalism: An Introduction", in Colclough and Manor (1991, pages 1-25), *States or Markets? Neo-liberalism and the Development Policy Debate*. Oxford: Clarendon Press.

_____ (1991b), "Who Should Learn to Pay? An Assessment of Neo-liberal Approaches to Education Policy", in Colclough and Manor (1991 pages 197-213), *States or Markets? Neo-liberalism and the Development Policy Debate*. Oxford: Clarendon Press.

_____ (1993), "Increasing the Equity and Efficiency of Public Expenditures on Education". Mimeo. Sussex: The Institute of Development Studies.

Colclough, C., and Manor, J. (1991) (eds.), *States or Markets? Neo-liberalism and the Development Policy Debate*. Oxford: Clarendon Press.

Colclough , C., with Lewin, K. (1993), *Educating All the Children: Strategies for Primary Schooling in the South*. Oxford: Clarendon Press.

Coleman, J., Hoffer, T. and Kilgore, S. (1982), *High School Achievement: Public, Catholic and Private Schools Compared*. New York: Basic Books.

Cornia, G.A., R. Jolly, and F. Stewart (1987) (eds), *Adjustment with a Human Face*. Oxford: Clarendon Press.

Cox, D. and E. Jimenez (1990), "The Relative Effectiveness of Private and Public Schools: Evidence from Two Developing Countries". *Journal of Development Economics*, 34, 1/2, pages 99-122.

Crowder, M., (ed.) (1984), *Education for Development in Botswana*. Gaborone: Macmillan for the Botswana Society.

De Wulf, L.H. (1975), "Fiscal Incidence Studies in Developing Countries: Survey and Critique". *IMF Staff Papers*, 22, pages 61-131.

Eisemon, T.O. (1992), "Private Initiatives and Traditions of State Control in Higher Education in Sub-Saharan Africa". *PHREE Background Paper Series*, Document No. PHREE/92/48. Washington, DC: The World Bank.

Fried, B. and M. Abuhadra (1991) "Reforms in Higher Education: the Case of Chile in the 1980s". *Higher Education*, 21, 1 and 2, pages 137-149.

Fuller, B. (1989), "Eroding Economy, Declining School Quality: The Case of Malawi". *IDS Bulletin*, Vol 20, No 1, pages 11-16.

Gertler, P. and J. van der Gaag (1988), "Measuring the Willingness to Pay for Social Services in Developing Countries". *Living Standards Measurement Study Working Paper* No. 45. Washington, DC: The World Bank.

Gertler, P. and P. Glewwe (1990), "The Willingness to Pay for Education in Developing Countries: Evidence from Rural Peru". *Journal of Public Economics*, 42, 3, pages 251-275.

_____ (1992), "The Willingness of Households to Pay for Improvements in School Quality: Evidence from Ghana". World Bank Conference on Public Expenditures and the Poor: Incidence and Targeting, June, Washington, DC.

Gil Diaz, F. (1987), "Some Lessons From Mexico's Tax Reform", in Newbery and Stern (1987), pages 333-359, *The Theory of Taxation for Developing Countries*. Oxford: Oxford University Press for the World Bank.

Government of Malawi (1984), "The Impact of the Increase in School Fees on Primary School Enrolments in 1983". Mimeo. Lilongwe: Ministry of Education and Culture.

Government of Sri Lanka (1981), *Education Proposals for Reform*. Colombo: Government Press.

Hinchliffe, K. (1989), "Economic Austerity, Structural Adjustment and Education : The Case of Nigeria". *IDS Bulletin*, Vol. 20, No 1, pages 5-10.

_____ (1993), "Neo-liberal Prescriptions for Education Finance - Unfortunately Necessary or Inherently Desirable?". *International Journal of Educational Development*, Vol. 13, No.1, January.

Jallade, J.P. (1974), *Public Expenditure on Education and Income Distribution in Colombia.* Baltimore: John Hopkins U.P.

_____ (1978), "Financing Higher Education: The Equity Aspects". *Comparative Education Review*, 22, 2, pages 309-325.

James, Estelle (1991), "Private Higher Education: The Philippines as a Prototype". *Higher Education*, 21, pages 189-206.

Jimenez, E. (1989), "Social Sector Pricing Policy Revisited: A Survey of Some Recent Controversies". *Proceedings of the World Bank Annual Conference on Development Economics*, pages 109-138.

Jimenez, E., V. Paqueo, and M. Lourdes de Vera (1987), "Does Local Financing Make Public Schools More Efficient? The Philippine Case". Unpublished Mimeo. Washington, DC: The World Bank.

Jimenez, E. (1987), *Pricing Policy in the Social Sectors: Cost-Recovery for Education and Health in Developing Countries* Baltimore: Johns Hopkins University Press.

Jimenez, E. and J.P. Tan (1987), "Decentralised and Private Education: The Case of Pakistan". *Comparative Education*, 23, 2, pages 173-190.

Jimenez, E., M. Lockheed, and N. Wattanawaha (1988), "The Relative Efficiency of Private and Public Schools: The Case of Thailand". *The World Bank Economic Review*, 2, 2, pages 139-164.

Jimenez, E., M.E. Lockheed, E.Luna, and V. Paqueo (1989), "School Effects and Costs for Private and Public Schools in the Dominican Republic". *Policy, Planning and Research, Working Papers* 288. Washington, DC: The World Bank.

Jimenez, E., M.E. Lockheed, and V. Paqueo. (1991), "The Relative Efficiency of Private and Public Schools in Developing Countries". *The World Bank Research Observer*, 6, 2, pages 205-218.

Kaluba, L.H. (1986), "Education in Zambia: the Problem of Access to Schooling and the Paradox of the Private School Solution". *Comparative Education*, Vol. 22, No.2, pages 159-169.

Kann, U. (1984), "Problems with Equity in the Education System: the Provision of Basic Education in Botswana", in M. Crowder (1984, pages 85-100), *Education for Development in Botswana.* Gaborone: Macmillan for the Botswana Society.

Katz, M. (1987), "Pricing Publicly Supplied Goods and Services", in Newbery and Stern (1987), pages 560-588, *The Theory of Taxation for Developing Countries.* Oxford: Oxford University Press for the World Bank.

Khan, S.R. (1991), "The Income Redistributional Impact of Financing Higher Education in Pakistan". *World Development*, 19, 9, pages 1241-1246.

King, E., and Hill, M.A. (eds.) (1991), "Women's Education in Developing Countries: Barriers, Benefits and Policy", *PHREE Background Paper*, 91/40, Washington, DC: World Bank.

Knight, J. (1989), "Educational Policy Issues in a Period of Stabilization and Structural Adjustment". *Journal of Development Planning*, 19, pages 59-72.

Knight, J.B., and Sabot, R.H. (1990), *Education, Production and Inequality: The East African Natural Experiment*, Oxford University Press for the World Bank, Oxford.

Kugler, B. and R. McMeekin, (1991), *Argentina: Reallocating Resources for the Improvement of Education*. A World Bank Country Study. Washington, DC: World Bank.

Lavy, V. (1992), "Investment in Human Capital: Schooling Supply Constraints in Rural Ghana". *LSMS Working Paper* No, 93. Washington, DC: World Bank.

Levy, D. (1986), *Higher Education and the State in Latin America: Private Challenges to Public Dominance*. Chicago: University of Chicago Press.

Levy, D. (1989), "Evaluating Private Institutions: The Case of Latin American Higher Education", in E. James (ed.), *The Nonprofit Sector in International Perspective: Studies in Comparative Culture and Policy*. Yale Studies on Nonprofit Organizations. New York and Oxford: Oxford University Press, pages 84-109.

Lillis, K., and Ayot, H. (1988), "Community Financing of Education in Kenya", in Bray with Lillis (1988, pages 117-129), *Community Financing of Education: Issues and Policy Implications in Less Developed Countries*. Oxford: Pergamon Press, for the Commonwealth Secretariat.

Lockheed, M.E. and A. Verspoor, et al. (1991), *Improving Primary Education in Developing Countries*. Oxford: Oxford University Press for the World Bank.

Meerman, J. (1983), "Cost Recovery in a Project Context: Some World Bank Experience in Tropical Africa". *World Development*, 11, 6, pages 503-574.

de Mello e Souza, A. (1991), "Higher Education in Brazil: Recent Evolution and Current Issues", *Higher Education*, 21, pages 223-233.

Mingat, A., and Psacharopoulos, G. (1984), "Education Costs and Financing in Africa: Some Facts and Possible Lines of Action". Mimeo. Washington, DC: World Bank Education Department.

Mingat, A. and J.P. Tan (1985), "Subsidization of Higher Education Versus Expansion of Primary Enrolments: What Can a Shift of Resources Achieve in Sub-Saharan Africa?" *International Journal of Educational Development*, 5, 4, pages 259-268.

Mingat, A. and J.P. Tan (1986a), "Who Profits from the Public Funding of Education? A Comparison of World Regions". *Comparative Education Review*, 30, 2.

Mingat, A. and J.P. Tan (1986b), "Expanding Education through User Charges: What Can be Achieved in Malawi and other LDCs?", *Economics of Education Review*, 5, 8, pages 273-286.

Mingat, A. and J.P. Tan (1986c), "Financing Public Higher Education in Developing Countries: The Potential Role of Loan Schemes". *Higher Education* 15, pages 3-4.

Murnane, R.J., S. Newstead, R.J. Olsen (1985), "Comparing Public and Private Schools: The Puzzling Role of Selectivity Bias". *Journal of Business and Economic Statistics*, 3, 1, pages 23-35.

Navarro, C.N. (1991), "Venezuelan Higher Education in Perspective". *Higher Education*, 21, pages 177-188.

Newbery, D., and Stern, N. (eds.) (1987), *The Theory of Taxation for Developing Countries*. New York: Oxford University Press, for the World Bank.

Psacharopoulos, G. (1987), "Public Versus Private Schools in Developing Countries: Evidence from Colombia and Tanzania". *International Journal of Educational Development*, 7, 1, pages 59-67.

Psacharopoulos, G., and Woodhall, M. (1985), *Education for Development: an Analysis of Investment Choices*. Oxford: Oxford University Press, for the World Bank.

Roth, G. (1987) "Roles of the Private Sector in the Supply of Public Services in Less Developed Countries", in C.A. Kent (ed.), *Entrepreneurship and the Privatizing of Government*. New York and London: Greenwood Press, Quorum Books, pages 195-244.

Schiefelbein, E. (1990), "Chile: Economic Incentives in Higher Education". *Higher Education Policy*, 3, 3, pages 21-25.

Schultz, T.P. (1991), "Returns to Women's Education", in King and Hill, (1991, pages 43-78) "Women's Education in Developing Countries: Barriers, Benefits and Policy". *PHREE Background Paper*, 91/40. Washington, DC: World Bank.

Schkolnik, M. (1992), "The Distributive Impact of Fiscal and Labour Market Reforms: Chile's 1990-1 Reforms". *Innocenti Occasional Papers* EPS 33. Florence: UNICEF International Child Development Centre.

Stern, N. (1989), "Comment on 'Social Sector Pricing Policy Revisited', by Jimenez". *Proceedings of the World Bank Annual Conference on Development Economics*, pages 143-147. Washington, DC: World Bank.

Stewart, F. (1991), "Education and Adjustment: The Experience of the 1980s and Lessons for the 1990s". Mimeo. London: Commonwealth Secretariat.

Tan, J.P., K. H. Lee, A. Mingat (1984), "User Charges for Education: The Ability and Willingness to Pay in Malawi". *Staff Working Paper* No. 661. Washington: World Bank.

Tanzi, V. (1987), "Quantitative Characteristics of the Tax Systems of Developing Countries", in Newbery and Stern (1987), pages 205-241, *The Theory of Taxation for Developing Countries*. Oxford: Oxford University Press for the World Bank.

Thobani, M. (1984), "Charging User Fees for Social Services: Education in Malawi". *Comparative Education Review*, 28, 3, pages 402-423.

Tilak, J.B.G. (1991), "Privatization of Higher Education". *Prospects*, 21, 2, pages 227-239.

Tsang, M.C., and Taoklam, W. (1992), "Comparing the Costs of Government and Private Primary Education in Thailand'. *International Journal of Educational Development*, Vol. 12, No.3, July, pages 177-190.

Wanasinghe, J. (1988), "A Study of the Emergence of the Free Education Scheme in Sri Lanka and a Critical Analysis of Policies Formulated for its Survival". *International Journal of Educational Development*, 8, 2, pages 99-108.

Woodhall, M. (1983), "Student Loans as a Means of Financing Higher Education: Lessons from International Experience". *World Bank Staff Working Paper*, No 599. Washington, DC: World Bank.

Woodhall, M. (1988), "Designing a Student Loan Program for a Developing Country: The Relevance of International Experience". *Economics of Education Review*. 7, 1, pages 153-161.

World Bank (1986), *Financing Education in Developing Countries: An Exploration of Policy Options*. Washington, DC: World Bank

_____ (1988), *Education in Sub-Saharan Africa: Policies for Adjustment, Revitalisation and Expansion*. Washington, DC: World Bank.

UNICEF INTERNATIONAL CHILD DEVELOPMENT CENTRE
ECONOMIC AND SOCIAL POLICY RESEARCH PROGRAMME
INNOCENTI OCCASIONAL PAPERS
ECONOMIC POLICY SERIES

The Economic Policy Series consists of thorough and self-contained analytical reports that usually serve as background documentation for the four main research projects currently being carried out within the Economic and Social Policy Research Programme of the ICDC.

The papers in the series (ISSN 1014-7837) are all available in English. Price: $8 each.

For more information or to order papers in the Economic Policy Series, write the Economic and Social Policy Research Group, UNICEF-ICDC, Piazza SS. Annunziata 12, 50122 Florence, Italy. Please accompany all orders with a nontransferable cheque made out to UNICEF.

EPS 1 *Economic Decline and Child Survival: The Plight of Latin America in the Eighties.* Teresa Albanez, Eduardo Bustelo, Giovanni Andrea Cornia and Eva Jespersen. Special Subseries: "Fiscal Policy and the Poor". (March 1989).

EPS 2 *Child Poverty and Deprivation in Industrialized Countries: Recent Trends and Policy Options.* Giovanni Andrea Cornia. Special Subseries: "Child Poverty in Industrialized Countries". (March 1990). Also available in French and Spanish.

EPS 3 *Education, Skills and Industrial Development in the Structural Transformation of Africa.* Sanjaya Lall. Special Subseries: "Structural Adjustment in Sub-Saharan Africa". (July 1990).

EPS 4 *Rural Differentiation, Poverty and Agricultural Crisis in Sub-Saharan Africa: Toward An Appropriate Policy Response.* Giovanni Andrea Cornia and Richard Strickland. Special Subseries: "Structural Adjustment in Sub-Saharan Africa". (July 1990).

EPS 5 *Increased Aid Flows and Human Resource Development in Africa.* Paul Mosley. Special Subseries: "Structural Adjustment in Sub-Saharan Africa". (August 1990).

EPS 6 *Child Poverty and Deprivation in Italy: 1950 to the Present.* Chiara Saraceno. Special Subseries: "Child Poverty in Industrialized Countries". (September 1990). Also available in Italian.

EPS 7 *Toward Structural Transformation with a Human Focus: The Economic Programmes and Policies of Zambia in the 1980s.* Venkatesh Seshamani. Special Subseries: "Structural Adjustment in Sub-Saharan Africa". (October 1990).

EPS 8 *Child Poverty and Deprivation in the UK.* Jonathan Bradshaw. Special Subseries: "Child Poverty in Industrialized Countries". (October 1990).

EPS 9 *Adjustment Policies in Tanzania, 1981-1989: The Impact on Growth, Structure and Human Welfare.* Jumanne H. Wagao. Special Subseries: "Structural Adjustment in Sub-Saharan Africa". (October 1990).

EPS 10 *The Causes and Consequences of Child Poverty in the United States.* Sheldon Danziger and Jonathan Stern. Special Subseries: "Child Poverty in Industrialized Countries". (November 1990).

INNOCENTI OCCASIONAL PAPERS
ECONOMIC POLICY SERIES

(Continued From Previous Page)

EPS 11 *The Fiscal System, Adjustment and the Poor.* Giovanni Andrea Cornia and Frances Stewart. Special Subseries: "Fiscal Policy and the Poor". (November 1990).

EPS 12 *The Health Sector and Social Policy Reform in the Philippines since 1985.* Wilfredo G. Nuqui. Special Subseries: "Fiscal Policy and the Poor". (January 1991).

EPS 13 *The Impact of Economic Crisis and Adjustment on Health Care in Mexico.* Carlos Cruz Rivero, Rafael Lozano Ascencio and Julio Querol Vinagre. Special Subseries: "Fiscal Policy and the Poor". (February 1991).

EPS 14 *Structural Adjustment, Growth and Welfare: The Case of Niger, 1982-1989.* Kiari Liman Tinguiri. Special Subseries: "Structural Adjustment in Sub-Saharan Africa". (March 1991).

EPS 15 *The Impact of Self-Imposed Adjustment: The Case of Burkina Faso, 1983-1989.* Kimseyinga Savadogo and Claude Wetta. Special Subseries: "Structural Adjustment in Sub-Saharan Africa". (April 1991).

EPS 16 *Liberalization for Development: Zimbabwe's Adjustment without the Fund.* Robert Davies, David Sanders and Timothy Shaw. Special Subseries: "Structural Adjustment in Sub-Saharan Africa". (May 1991).

EPS 17 *Fiscal Shock, Wage Compression and Structural Reform: Mexican Adjustment and Educational Policy in the 1980s.* Fernando Valerio. Special Subseries: "Fiscal Policy and the Poor". (June 1991).

EPS 18 *Patterns of Government Expenditure in Developing Countries during the 1980s: The Impact on Social Services.* Beth Ebel. Special Subseries: "Fiscal Policy and the Poor". (July 1991).

EPS 19 *Ecuador: Crisis, Adjustment and Social Policy in the 1980s.* The Ecuadorian Centre of Social Research. Special Subseries: "Fiscal Policy and the Poor". (August 1991).

EPS 20 *Government Expenditures for Children and Their Families in Advanced Industrialized Countries, 1960-85.* Sheila B. Kamerman and Alfred J. Kahn. Special Subseries: "Child Poverty in Industrialized Countries". (September 1991).

EPS 21 *Is Adjustment Conducive to Long-term Development? The Case of Africa in the 1980s.* Giovanni Andrea Cornia. Special Subseries: "Structural Adjustment in Sub-Saharan Africa". (October 1991).

EPS 22 *Children in the Welfare State: Current Problems and Prospects in Sweden.* Sven E. Olsson and Roland Spånt. Special Subseries: "Child Poverty in Industrialized Countries". (December 1991).

EPS 23 *Eradicating Child Malnutrition: Thailand's Health, Nutrition and Poverty Alleviation Policy in the 1980s.* Thienchay Kiranandana and Kraisid Tontisirin. Special Subseries: "Fiscal Policy and the Poor". (January 1992).

INNOCENTI OCCASIONAL PAPERS
ECONOMIC POLICY SERIES
(Continued From Previous Page)

EPS 24 *Child Welfare and the Socialist Experiment: Social and Economic Trends in the USSR, 1950-90.* Alexandr Riazantsev, Sándor Sipos and Oleg Labetsky. Special Subseries: "Child Poverty in Industrialized Countries". (February 1992).

EPS 25 *Improving Nutrition in Tanzania in the 1980s: The Iringa Experience.* Olivia Yambi and Raphael Mlolwa. Special Subseries: "Fiscal Policy and the Poor". (March 1992).

EPS 26 *Growth, Income Distribution and Household Welfare in the Industrialized Countries since the First Oil Shock.* Andrea Boltho. Special Subseries: "Child Poverty in Industrialized Countries". (April 1992).

EPS 27 *Trends in the Structure and Stability of the Family from 1950 to the Present: The Impact on Child Welfare.* Chiara Saraceno. Special Subseries: "Child Poverty in Industrialized Countries". (May 1992).

EPS 28 *Child Poverty and Deprivation in Portugal: A National Case Study.* Manuela Silva. Special Subseries: "Child Poverty in Industrialized Countries". (June 1992).

EPS 29 *Poverty Measurement in Central and Eastern Europe before the Transition to the Market Economy.* Sándor Sipos. Special Subseries: "Child Poverty in Industrialized Countries". (July 1992).

EPS 30 *The Economics of Disarmament: Prospects, Problems and Policies for the Disarmament Dividend.* Saadet Deger. Special Subseries: "Fiscal Policy and the Poor". (August 1992).

EPS 31 *External Debt, Fiscal Drainage and Child Welfare: Trends and Policy Proposals.* Stephany Griffith-Jones. Special Subseries: "Fiscal Policy and the Poor". (September 1992).

EPS 32 *Social Policy and Child Poverty: Hungary since 1945.* Júlia Szalai. Special Subseries: "Child Poverty in Industrialized Countries". (October 1992).

EPS 33 *The Distributive Impact of Fiscal and Labour Market Policies: Chile's 1990-1 Reforms.* Mariana Schkolnik. Special Subseries: "Fiscal Policy and the Poor". (November 1992).

EPS 34 *Changes in Health Care Financing and Health Status: The Case of China in the 1980s.* Yu Dezhi. Special Subseries: "Fiscal Policy and the Poor". (December 1992).

EPS 35 *Decentralization and Community Participation for Improving Access to Basic Services: An Empirical Approach.* Housainou Taal. Special Subseries: "Fiscal Policy and the Poor". (January 1993).

EPS 36 *Two Errors of Targeting.* Giovanni Andrea Cornia and Frances Stewart. Special Subseries: "Fiscal Policy and the Poor". (March 1993).

EPS 37 *Education and the Market: Which Parts of the Neo Liberal Solution are Correct?* Christopher Colclough. Special Subseries: "Fiscal Policy and the Poor". (July 1993).

unicef

International Child Development Centre

Piazza S.S. Annunziata, 12
50122 Florence, Italy
Tel. 3955-234-5258 - Fax 3955-244817
Telex 572297 UNICEF I

ISSN 1014-7837

BEST COPY AVAILABLE